| Codon | Consensus AA | $\omega$ | [Confidence Interval](* if lower bound > 1) |
| :---: | :---: | :---: | :---: |
| 1 | M | 0.018 | [6.2e-10,0.26] |
| 2 | K | 0.025 | [6.2e-10,0.26] |
| 3 | N | 0.024 | [6.2e-10,0.26] |
| 4 | P | 0.033 | [6.2e-10,0.26] |
| 5 | K | 0.024 | [6.2e-10,0.26] |
| 6 | K | 0.79 | [0.26,1] |
| 7 | K | 0.59 | [0.26,1] |
| 8 | S | 0.92 | [0.26,1] |
| 9 | G | 0.4 | [0.054,1] |
| 10 | G | 0.64 | [0.26,1] |
| 11 | F | 0.45 | [0.054,1] |
| 12 | R | 0.033 | [6.2e-10,0.26] |
| 13 | 1 | 0.028 | [6.2e-10,0.26] |
| 14 | V | 0.026 | [6.2e-10,0.26] |
| 15 | N | 0.027 | [6.2e-10,0.26] |
| 16 | M | 0.018 | [6.2e-10,0.26] |
| 17 | L | 0.037 | [6.2e-10,0.26] |
| 18 | K | 0.025 | [6.2e-10,0.26] |
| 19 | R | 0.033 | [6.2e-10,0.26] |
| 20 | G | 0.027 | [6.2e-10,0.26] |
| 21 | V | 0.026 | [6.2e-10,0.26] |
| 22 | A | 0.026 | [6.2e-10,0.26] |
| 23 | R | 0.037 | [6.2e-10,0.26] |
| 24 | V | 0.025 | [6.2e-10,0.26] |
| 25 | S | 0.21 | [0.013,1] |
| 26 | P | 0.033 | [6.2e-10,0.26] |
| 27 | F | 0.28 | [0.013,1] |
| 28 | G | 0.025 | [6.2e-10,0.26] |
| 29 | G | 0.028 | [6.2e-10,0.26] |
| 30 | L | 0.035 | [6.2e-10,0.26] |
| 31 | K | 0.023 | [6.2e-10,0.26] |
| 32 | R | 0.024 | [6.2e-10,0.26] |
| 33 | L | 0.035 | [6.2e-10,0.26] |
| 34 | P | 0.032 | [6.2e-10,0.26] |
| 35 | A | 0.026 | [6.2e-10,0.26] |
| 36 | G | 0.027 | [6.2e-10,0.26] |
| 37 | L | 0.035 | [6.2e-10,0.26] |
| 38 | L | 0.035 | [6.2e-10,0.26] |
| 39 | L | 0.035 | [6.2e-10,0.26] |
| 40 | G | 0.029 | [6.2e-10,0.26] |
| 41 | H | 0.033 | [6.2e-10,0.26] |
| 42 | G | 0.026 | [6.2e-10,0.26] |
| 43 | P | 0.033 | [6.2e-10,0.26] |
| 44 | 1 | 0.024 | [6.2e-10,0.26] |
| 45 | R | 0.025 | [6.2e-10,0.26] |
| 46 | M | 0.018 | [6.2e-10,0.26] |


| 47 | V | 0.028 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 48 | L | 0.035 | [6.2e-10,0.26] |
| 49 | A | 0.024 | [6.2e-10,0.26] |
| 50 | I | 0.021 | [6.2e-10,0.26] |
| 51 | L | 0.037 | [6.2e-10,0.26] |
| 52 | A | 0.026 | [6.2e-10,0.26] |
| 53 | F | 0.032 | [6.2e-10,0.26] |
| 54 | L | 0.035 | [6.2e-10,0.26] |
| 55 | R | 0.026 | [6.2e-10,0.26] |
| 56 | F | 0.031 | [6.2e-10,0.26] |
| 57 | T | 0.025 | [6.2e-10,0.26] |
| 58 | A | 0.025 | [6.2e-10,0.26] |
| 59 | I | 0.024 | [6.2e-10,0.26] |
| 60 | K | 0.023 | [6.2e-10,0.26] |
| 61 | P | 0.032 | [6.2e-10,0.26] |
| 62 | S | 0.035 | [6.2e-10,0.26] |
| 63 | L | 0.035 | [6.2e-10,0.26] |
| 64 | G | 0.027 | [6.2e-10,0.26] |
| 65 | L | 0.032 | [6.2e-10,0.26] |
| 66 | 1 | 0.024 | [6.2e-10,0.26] |
| 67 | N | 0.026 | [6.2e-10,0.26] |
| 68 | R | 0.026 | [6.2e-10,0.26] |
| 69 | W | 0.035 | [6.2e-10,0.26] |
| 70 | G | 0.03 | [6.2e-10,0.26] |
| 71 | S | 0.033 | [6.2e-10,0.26] |
| 72 | V | 0.023 | [6.2e-10,0.26] |
| 73 | G | 0.024 | [6.2e-10,0.26] |
| 74 | K | 0.024 | [6.2e-10,0.26] |
| 75 | K | 0.024 | [6.2e-10,0.26] |
| 76 | E | 0.022 | [6.2e-10,0.26] |
| 77 | A | 0.029 | [6.2e-10,0.26] |
| 78 | M | 0.018 | [6.2e-10,0.26] |
| 79 | E | 0.024 | [6.2e-10,0.26] |
| 80 | 1 | 0.19 | [0.013,0.26] |
| 81 | 1 | 0.02 | [6.2e-10,0.26] |
| 82 | K | 0.023 | [6.2e-10,0.26] |
| 83 | K | 0.023 | [6.2e-10,0.26] |
| 84 | F | 0.03 | [6.2e-10,0.26] |
| 85 | K | 0.023 | [6.2e-10,0.26] |
| 86 | K | 0.025 | [6.2e-10,0.26] |
| 87 | D | 0.026 | [6.2e-10,0.26] |
| 88 | L | 0.035 | [6.2e-10,0.26] |
| 89 | A | 0.029 | [6.2e-10,0.26] |
| 90 | A | 0.026 | [6.2e-10,0.26] |
| 91 | M | 0.018 | [6.2e-10,0.26] |
| 92 | L | 0.035 | [6.2e-10,0.26] |
| 93 | R | 0.026 | [6.2e-10,0.26] |


| 94 | 1 | 0.02 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 95 | I | 0.024 | [6.2e-10,0.26] |
| 96 | N | 0.027 | [6.2e-10,0.26] |
| 97 | A | 0.029 | [6.2e-10,0.26] |
| 98 | R | 0.023 | [6.2e-10,0.26] |
| 99 | K | 0.023 | [6.2e-10,0.26] |
| 100 | E | 0.022 | [6.2e-10,0.26] |
| 101 | K | 0.21 | [0.013,1] |
| 102 | K | 0.023 | [6.2e-10,0.26] |
| 103 | R | 0.026 | [6.2e-10,0.26] |
| 104 | R | 0.037 | [6.2e-10,0.26] |
| 105 | G | 0.027 | [6.2e-10,0.26] |
| 106 | A | 0.63 | [0.26,1] |
| 107 | D | 0.35 | [0.054,1] |
| 108 | T | 0.23 | [0.013,1] |
| 109 | S | 0.026 | [6.2e-10,0.26] |
| 110 | V | 0.21 | [0.013,1] |
| 111 | G | 0.027 | [6.2e-10,0.26] |
| 112 | 1 | 0.025 | [6.2e-10,0.26] |
| 113 | V | 0.47 | [0.054,1] |
| 114 | G | 0.23 | [0.013,1] |
| 115 | L | 0.032 | [6.2e-10,0.26] |
| 116 | L | 0.035 | [6.2e-10,0.26] |
| 117 | L | 0.035 | [6.2e-10,0.26] |
| 118 | T | 0.028 | [6.2e-10,0.26] |
| 119 | T | 0.026 | [6.2e-10,0.26] |
| 120 | A | 0.22 | [0.013,1] |
| 121 | M | 0.018 | [6.2e-10,0.26] |
| 122 | A | 0.025 | [6.2e-10,0.26] |
| 123 | V | 0.37 | [0.054,1] |
| 124 | E | 0.022 | [6.2e-10,0.26] |
| 125 | V | 0.22 | [0.013,1] |
| 126 | T | 0.029 | [6.2e-10,0.26] |
| 127 | R | 0.026 | [6.2e-10,0.26] |
| 128 | R | 0.036 | [6.2e-10,0.26] |
| 129 | G | 0.024 | [6.2e-10,0.26] |
| 130 | S | 0.23 | [0.013,1] |
| 131 | A | 0.025 | [6.2e-10,0.26] |
| 132 | Y | 0.032 | [6.2e-10,0.26] |
| 133 | Y | 0.034 | [6.2e-10,0.26] |
| 134 | M | 0.018 | [6.2e-10,0.26] |
| 135 | Y | 0.032 | [6.2e-10,0.26] |
| 136 | L | 0.035 | [6.2e-10,0.26] |
| 137 | D | 0.023 | [6.2e-10,0.26] |
| 138 | R | 0.024 | [6.2e-10,0.26] |
| 139 | S | 0.21 | [0.013,1] |
| 140 | D | 0.026 | [6.2e-10,0.26] |


| 141 | A | 0.029 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 142 | G | 0.025 | [6.2e-10,0.26] |
| 143 | E | 0.2 | [0.013,0.26] |
| 144 | A | 0.026 | [6.2e-10,0.26] |
| 145 | I | 0.024 | [6.2e-10,0.26] |
| 146 | S | 0.035 | [6.2e-10,0.26] |
| 147 | F | 0.032 | [6.2e-10,0.26] |
| 148 | P | 0.47 | [0.054,1] |
| 149 | T | 0.026 | [6.2e-10,0.26] |
| 150 | T | 0.27 | [0.013,1] |
| 151 | L | 0.29 | [0.013,1] |
| 152 | G | 0.025 | [6.2e-10,0.26] |
| 153 | V | 0.2 | [0.013,1] |
| 154 | N | 0.025 | [6.2e-10,0.26] |
| 155 | K | 0.024 | [6.2e-10,0.26] |
| 156 | C | 0.033 | [6.2e-10,0.26] |
| 157 | Y | 0.27 | [0.013,1] |
| 158 | 1 | 0.21 | [0.013,1] |
| 159 | Q | 0.033 | [6.2e-10,0.26] |
| 160 | 1 | 0.024 | [6.2e-10,0.26] |
| 161 | M | 0.018 | [6.2e-10,0.26] |
| 162 | D | 0.025 | [6.2e-10,0.26] |
| 163 | L | 0.033 | [6.2e-10,0.26] |
| 164 | G | 0.025 | [6.2e-10,0.26] |
| 165 | H | 0.03 | [6.2e-10,0.26] |
| 166 | M | 0.17 | [0.013,0.26] |
| 167 | C | 0.035 | [6.2e-10,0.26] |
| 168 | D | 0.024 | [6.2e-10,0.26] |
| 169 | A | 0.026 | [6.2e-10,0.26] |
| 170 | T | 0.026 | [6.2e-10,0.26] |
| 171 | M | 0.018 | [6.2e-10,0.26] |
| 172 | S | 0.026 | [6.2e-10,0.26] |
| 173 | Y | 0.036 | [6.2e-10,0.26] |
| 174 | E | 0.023 | [6.2e-10,0.26] |
| 175 | C | 0.032 | [6.2e-10,0.26] |
| 176 | P | 0.035 | [6.2e-10,0.26] |
| 177 | M | 0.018 | [6.2e-10,0.26] |
| 178 | L | 0.035 | [6.2e-10,0.26] |
| 179 | D | 0.024 | [6.2e-10,0.26] |
| 180 | E | 0.022 | [6.2e-10,0.26] |
| 181 | G | 0.026 | [6.2e-10,0.26] |
| 182 | V | 0.024 | [6.2e-10,0.26] |
| 183 | E | 0.024 | [6.2e-10,0.26] |
| 184 | P | 0.032 | [6.2e-10,0.26] |
| 185 | D | 0.026 | [6.2e-10,0.26] |
| 186 | D | 0.024 | [6.2e-10,0.26] |
| 187 | V | 0.025 | [6.2e-10,0.26] |


| 188 | D | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 189 | C | 0.033 | [6.2e-10,0.26] |
| 190 | W | 0.035 | [6.2e-10,0.26] |
| 191 | C | 0.032 | [6.2e-10,0.26] |
| 192 | N | 0.024 | [6.2e-10,0.26] |
| 193 | T | 0.024 | [6.2e-10,0.26] |
| 194 | T | 0.026 | [6.2e-10,0.26] |
| 195 | S | 0.035 | [6.2e-10,0.26] |
| 196 | T | 0.03 | [6.2e-10,0.26] |
| 197 | W | 0.035 | [6.2e-10,0.26] |
| 198 | V | 0.029 | [6.2e-10,0.26] |
| 199 | V | 0.023 | [6.2e-10,0.26] |
| 200 | Y | 0.033 | [6.2e-10,0.26] |
| 201 | G | 0.027 | [6.2e-10,0.26] |
| 202 | T | 0.026 | [6.2e-10,0.26] |
| 203 | C | 0.034 | [6.2e-10,0.26] |
| 204 | H | 0.27 | [0.013,1] |
| 205 | H | 0.031 | [6.2e-10,0.26] |
| 206 | K | 0.025 | [6.2e-10,0.26] |
| 207 | K | 0.025 | [6.2e-10,0.26] |
| 208 | G | 0.03 | [6.2e-10,0.26] |
| 209 | E | 0.024 | [6.2e-10,0.26] |
| 210 | A | 0.22 | [0.013,1] |
| 211 | R | 0.034 | [6.2e-10,0.26] |
| 212 | R | 0.034 | [6.2e-10,0.26] |
| 213 | S | 0.035 | [6.2e-10,0.26] |
| 214 | R | 0.026 | [6.2e-10,0.26] |
| 215 | R | 0.026 | [6.2e-10,0.26] |
| 216 | A | 0.24 | [0.013,1] |
| 217 | V | 0.023 | [6.2e-10,0.26] |
| 218 | T | 0.21 | [0.013,1] |
| 219 | L | 0.032 | [6.2e-10,0.26] |
| 220 | P | 0.29 | [0.013,1] |
| 221 | S | 0.29 | [0.013,1] |
| 222 | H | 0.031 | [6.2e-10,0.26] |
| 223 | S | 0.28 | [0.013,1] |
| 224 | T | 0.027 | [6.2e-10,0.26] |
| 225 | R | 0.023 | [6.2e-10,0.26] |
| 226 | K | 0.023 | [6.2e-10,0.26] |
| 227 | L | 0.035 | [6.2e-10,0.26] |
| 228 | Q | 0.035 | [6.2e-10,0.26] |
| 229 | T | 0.024 | [6.2e-10,0.26] |
| 230 | R | 0.034 | [6.2e-10,0.26] |
| 231 | S | 0.032 | [6.2e-10,0.26] |
| 232 | Q | 0.033 | [6.2e-10,0.26] |
| 233 | T | 0.027 | [6.2e-10,0.26] |
| 234 | W | 0.035 | [6.2e-10,0.26] |


| 235 | L | 0.036 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 236 | E | 0.024 | [6.2e-10,0.26] |
| 237 | S | 0.035 | [6.2e-10,0.26] |
| 238 | R | 0.026 | [6.2e-10,0.26] |
| 239 | E | 0.024 | [6.2e-10,0.26] |
| 240 | Y | 0.033 | [6.2e-10,0.26] |
| 241 | T | 0.22 | [0.013,1] |
| 242 | K | 0.023 | [6.2e-10,0.26] |
| 243 | H | 0.03 | [6.2e-10,0.26] |
| 244 | L | 0.035 | [6.2e-10,0.26] |
| 245 | 1 | 0.025 | [6.2e-10,0.26] |
| 246 | R | 0.35 | [0.054,1] |
| 247 | V | 0.028 | [6.2e-10,0.26] |
| 248 | E | 0.024 | [6.2e-10,0.26] |
| 249 | N | 0.025 | [6.2e-10,0.26] |
| 250 | W | 0.035 | [6.2e-10,0.26] |
| 251 | 1 | 0.02 | [6.2e-10,0.26] |
| 252 | F | 0.03 | [6.2e-10,0.26] |
| 253 | R | 0.023 | [6.2e-10,0.26] |
| 254 | N | 0.024 | [6.2e-10,0.26] |
| 255 | P | 0.034 | [6.2e-10,0.26] |
| 256 | G | 0.025 | [6.2e-10,0.26] |
| 257 | F | 0.032 | [6.2e-10,0.26] |
| 258 | A | 0.023 | [6.2e-10,0.26] |
| 259 | L | 0.3 | [0.013,1] |
| 260 | A | 0.58 | [0.26,1] |
| 261 | A | 0.23 | [0.013,1] |
| 262 | A | 0.24 | [0.013,1] |
| 263 | A | 0.22 | [0.013,1] |
| 264 | I | 0.027 | [6.2e-10,0.26] |
| 265 | A | 0.23 | [0.013,1] |
| 266 | W | 0.035 | [6.2e-10,0.26] |
| 267 | L | 0.035 | [6.2e-10,0.26] |
| 268 | L | 0.29 | [0.013,1] |
| 269 | G | 0.027 | [6.2e-10,0.26] |
| 270 | S | 0.025 | [6.2e-10,0.26] |
| 271 | S | 0.27 | [0.013,1] |
| 272 | T | 0.024 | [6.2e-10,0.26] |
| 273 | S | 0.024 | [6.2e-10,0.26] |
| 274 | Q | 0.035 | [6.2e-10,0.26] |
| 275 | K | 0.025 | [6.2e-10,0.26] |
| 276 | V | 0.026 | [6.2e-10,0.26] |
| 277 | I | 0.02 | [6.2e-10,0.26] |
| 278 | Y | 0.033 | [6.2e-10,0.26] |
| 279 | L | 0.035 | [6.2e-10,0.26] |
| 280 | V | 0.22 | [0.013,1] |
| 281 | M | 0.018 | [6.2e-10,0.26] |


| 282 | 1 | 0.02 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 283 | L | 0.29 | [0.013,1] |
| 284 | L | 0.035 | [6.2e-10,0.26] |
| 285 | 1 | 0.027 | [6.2e-10,0.26] |
| 286 | A | 0.22 | [0.013,1] |
| 287 | P | 0.031 | [6.2e-10,0.26] |
| 288 | A | 0.025 | [6.2e-10,0.26] |
| 289 | Y | 0.033 | [6.2e-10,0.26] |
| 290 | S | 0.025 | [6.2e-10,0.26] |
| 291 | 1 | 0.024 | [6.2e-10,0.26] |
| 292 | R | 0.21 | [0.013,1] |
| 293 | C | 0.032 | [6.2e-10,0.26] |
| 294 | 1 | 0.022 | [6.2e-10,0.26] |
| 295 | G | 0.027 | [6.2e-10,0.26] |
| 296 | V | 0.026 | [6.2e-10,0.26] |
| 297 | S | 0.024 | [6.2e-10,0.26] |
| 298 | N | 0.026 | [6.2e-10,0.26] |
| 299 | R | 0.025 | [6.2e-10,0.26] |
| 300 | D | 0.023 | [6.2e-10,0.26] |
| 301 | F | 0.26 | [0.013,1] |
| 302 | V | 0.023 | [6.2e-10,0.26] |
| 303 | E | 0.023 | [6.2e-10,0.26] |
| 304 | G | 0.027 | [6.2e-10,0.26] |
| 305 | M | 0.018 | [6.2e-10,0.26] |
| 306 | S | 0.035 | [6.2e-10,0.26] |
| 307 | G | 0.03 | [6.2e-10,0.26] |
| 308 | G | 0.024 | [6.2e-10,0.26] |
| 309 | T | 0.027 | [6.2e-10,0.26] |
| 310 | W | 0.035 | [6.2e-10,0.26] |
| 311 | V | 0.029 | [6.2e-10,0.26] |
| 312 | D | 0.026 | [6.2e-10,0.26] |
| 313 | V | 0.24 | [0.013,1] |
| 314 | V | 0.025 | [6.2e-10,0.26] |
| 315 | L | 0.035 | [6.2e-10,0.26] |
| 316 | E | 0.024 | [6.2e-10,0.26] |
| 317 | H | 0.033 | [6.2e-10,0.26] |
| 318 | G | 0.026 | [6.2e-10,0.26] |
| 319 | G | 0.029 | [6.2e-10,0.26] |
| 320 | C | 0.033 | [6.2e-10,0.26] |
| 321 | V | 0.027 | [6.2e-10,0.26] |
| 322 | T | 0.026 | [6.2e-10,0.26] |
| 323 | V | 0.22 | [0.013,1] |
| 324 | M | 0.018 | [6.2e-10,0.26] |
| 325 | A | 0.025 | [6.2e-10,0.26] |
| 326 | Q | 0.033 | [6.2e-10,0.26] |
| 327 | D | 0.023 | [6.2e-10,0.26] |
| 328 | K | 0.023 | [6.2e-10,0.26] |


| 329 | P | 0.032 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 330 | T | 0.23 | [0.013,1] |
| 331 | v | 0.028 | [6.2e-10,0.26] |
| 332 | D | 0.023 | [6.2e-10,0.26] |
| 333 | I | 0.021 | [6.2e-10,0.26] |
| 334 | E | 0.022 | [6.2e-10,0.26] |
| 335 | L | 0.035 | [6.2e-10,0.26] |
| 336 | v | 0.026 | [6.2e-10,0.26] |
| 337 | T | 0.025 | [6.2e-10,0.26] |
| 338 | T | 0.22 | [0.013,1] |
| 339 | T | 0.024 | [6.2e-10,0.26] |
| 340 | V | 0.028 | [6.2e-10,0.26] |
| 341 | S | 0.025 | [6.2e-10,0.26] |
| 342 | N | 0.024 | [6.2e-10,0.26] |
| 343 | M | 0.018 | [6.2e-10,0.26] |
| 344 | A | 0.025 | [6.2e-10,0.26] |
| 345 | E | 0.022 | [6.2e-10,0.26] |
| 346 | V | 0.22 | [0.013,1] |
| 347 | R | 0.026 | [6.2e-10,0.26] |
| 348 | S | 0.033 | [6.2e-10,0.26] |
| 349 | Y | 0.033 | [6.2e-10,0.26] |
| 350 | C | 0.032 | [6.2e-10,0.26] |
| 351 | Y | 0.034 | [6.2e-10,0.26] |
| 352 | E | 0.022 | [6.2e-10,0.26] |
| 353 | A | 0.025 | [6.2e-10,0.26] |
| 354 | S | 0.034 | [6.2e-10,0.26] |
| 355 | 1 | 0.19 | [0.013, 0.26 ] |
| 356 | S | 0.032 | [6.2e-10,0.26] |
| 357 | D | 0.023 | [6.2e-10,0.26] |
| 358 | M | 0.018 | [6.2e-10,0.26] |
| 359 | A | 0.029 | [6.2e-10,0.26] |
| 360 | S | 0.032 | [6.2e-10,0.26] |
| 361 | D | 0.21 | [0.013,1] |
| 362 | S | 0.026 | [6.2e-10,0.26] |
| 363 | R | 0.033 | [6.2e-10,0.26] |
| 364 | C | 0.033 | [6.2e-10,0.26] |
| 365 | P | 0.032 | [6.2e-10,0.26] |
| 366 | T | 0.026 | [6.2e-10,0.26] |
| 367 | Q | 0.035 | [6.2e-10,0.26] |
| 368 | G | 0.029 | [6.2e-10,0.26] |
| 369 | E | 0.024 | [6.2e-10,0.26] |
| 370 | A | 0.22 | [0.013,1] |
| 371 | Y | 0.27 | [0.013,1] |
| 372 | L | 0.035 | [6.2e-10,0.26] |
| 373 | D | 0.023 | [6.2e-10,0.26] |
| 374 | K | 0.023 | [6.2e-10,0.26] |
| 375 | Q | 0.034 | [6.2e-10,0.26] |


| 376 | S | 0.035 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 377 | D | 0.023 | [6.2e-10,0.26] |
| 378 | T | 0.03 | [6.2e-10,0.26] |
| 379 | Q | 0.035 | [6.2e-10,0.26] |
| 380 | Y | 0.3 | [0.013,1] |
| 381 | V | 0.026 | [6.2e-10,0.26] |
| 382 | C | 0.032 | [6.2e-10,0.26] |
| 383 | K | 0.024 | [6.2e-10,0.26] |
| 384 | R | 0.026 | [6.2e-10,0.26] |
| 385 | T | 0.025 | [6.2e-10,0.26] |
| 386 | L | 0.036 | [6.2e-10,0.26] |
| 387 | V | 0.21 | [0.013,1] |
| 388 | D | 0.023 | [6.2e-10,0.26] |
| 389 | R | 0.026 | [6.2e-10,0.26] |
| 390 | G | 0.029 | [6.2e-10,0.26] |
| 391 | W | 0.035 | [6.2e-10,0.26] |
| 392 | G | 0.027 | [6.2e-10,0.26] |
| 393 | N | 0.026 | [6.2e-10,0.26] |
| 394 | G | 0.025 | [6.2e-10,0.26] |
| 395 | C | 0.035 | [6.2e-10,0.26] |
| 396 | G | 0.026 | [6.2e-10,0.26] |
| 397 | L | 0.29 | [0.013,1] |
| 398 | F | 0.033 | [6.2e-10,0.26] |
| 399 | G | 0.026 | [6.2e-10,0.26] |
| 400 | K | 0.025 | [6.2e-10,0.26] |
| 401 | G | 0.024 | [6.2e-10,0.26] |
| 402 | S | 0.024 | [6.2e-10,0.26] |
| 403 | L | 0.035 | [6.2e-10,0.26] |
| 404 | V | 0.023 | [6.2e-10,0.26] |
| 405 | T | 0.026 | [6.2e-10,0.26] |
| 406 | C | 0.034 | [6.2e-10,0.26] |
| 407 | A | 0.23 | [0.013,1] |
| 408 | K | 0.023 | [6.2e-10,0.26] |
| 409 | F | 0.032 | [6.2e-10,0.26] |
| 410 | A | 0.21 | [0.013,1] |
| 411 | C | 0.033 | [6.2e-10,0.26] |
| 412 | S | 0.28 | [0.013,1] |
| 413 | K | 0.023 | [6.2e-10,0.26] |
| 414 | K | 0.024 | [6.2e-10,0.26] |
| 415 | M | 0.018 | [6.2e-10,0.26] |
| 416 | T | 0.23 | [0.013,1] |
| 417 | G | 0.024 | [6.2e-10,0.26] |
| 418 | K | 0.023 | [6.2e-10,0.26] |
| 419 | S | 0.024 | [6.2e-10,0.26] |
| 420 | 1 | 0.025 | [6.2e-10,0.26] |
| 421 | Q | 0.033 | [6.2e-10,0.26] |
| 422 | P | 0.031 | [6.2e-10,0.26] |


| 423 | E | 0.022 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 424 | N | 0.025 | [6.2e-10,0.26] |
| 425 | L | 0.035 | [6.2e-10,0.26] |
| 426 | E | 0.022 | [6.2e-10,0.26] |
| 427 | Y | 0.033 | [6.2e-10,0.26] |
| 428 | R | 0.034 | [6.2e-10,0.26] |
| 429 | I | 0.02 | [6.2e-10,0.26] |
| 430 | M | 0.018 | [6.2e-10,0.26] |
| 431 | L | 0.036 | [6.2e-10,0.26] |
| 432 | S | 0.29 | [0.013,1] |
| 433 | V | 0.025 | [6.2e-10,0.26] |
| 434 | H | 0.033 | [6.2e-10,0.26] |
| 435 | G | 0.026 | [6.2e-10,0.26] |
| 436 | S | 0.033 | [6.2e-10,0.26] |
| 437 | Q | 0.033 | [6.2e-10,0.26] |
| 438 | H | 0.03 | [6.2e-10,0.26] |
| 439 | S | 0.026 | [6.2e-10,0.26] |
| 440 | G | 0.024 | [6.2e-10,0.26] |
| 441 | M | 0.018 | [6.2e-10,0.26] |
| 442 | I | 0.027 | [6.2e-10,0.26] |
| 443 | V | 0.028 | [6.2e-10,0.26] |
| 444 | N | 0.028 | [6.2e-10,0.26] |
| 445 | D | 0.21 | [0.013,1] |
| 446 | X | 0.4 | [0.054,1] |
| 447 | G | 0.028 | [6.2e-10,0.26] |
| 448 | H | 0.29 | [0.013,1] |
| 449 | E | 0.026 | [6.2e-10,0.26] |
| 450 | T | 0.031 | [6.2e-10,0.26] |
| 451 | D | 0.026 | [6.2e-10,0.26] |
| 452 | E | 0.024 | [6.2e-10,0.26] |
| 453 | N | 0.22 | [0.013,1] |
| 454 | R | 0.026 | [6.2e-10,0.26] |
| 455 | A | 0.024 | [6.2e-10,0.26] |
| 456 | K | 0.21 | [0.013,1] |
| 457 | V | 0.027 | [6.2e-10,0.26] |
| 458 | E | 0.022 | [6.2e-10,0.26] |
| 459 | 1 | 0.21 | [0.013,1] |
| 460 | T | 0.024 | [6.2e-10,0.26] |
| 461 | P | 0.033 | [6.2e-10,0.26] |
| 462 | N | 0.027 | [6.2e-10,0.26] |
| 463 | S | 0.035 | [6.2e-10,0.26] |
| 464 | P | 0.032 | [6.2e-10,0.26] |
| 465 | R | 0.026 | [6.2e-10,0.26] |
| 466 | A | 0.025 | [6.2e-10,0.26] |
| 467 | E | 0.024 | [6.2e-10,0.26] |
| 468 | A | 0.025 | [6.2e-10,0.26] |
| 469 | T | 0.026 | [6.2e-10,0.26] |


| 470 | L | 0.035 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 471 | G | 0.026 | [6.2e-10,0.26] |
| 472 | G | 0.028 | [6.2e-10,0.26] |
| 473 | F | 0.033 | [6.2e-10,0.26] |
| 474 | G | 0.026 | [6.2e-10,0.26] |
| 475 | S | 0.024 | [6.2e-10,0.26] |
| 476 | L | 0.037 | [6.2e-10,0.26] |
| 477 | G | 0.027 | [6.2e-10,0.26] |
| 478 | L | 0.035 | [6.2e-10,0.26] |
| 479 | D | 0.025 | [6.2e-10,0.26] |
| 480 | C | 0.035 | [6.2e-10,0.26] |
| 481 | E | 0.024 | [6.2e-10,0.26] |
| 482 | P | 0.032 | [6.2e-10,0.26] |
| 483 | R | 0.023 | [6.2e-10,0.26] |
| 484 | T | 0.026 | [6.2e-10,0.26] |
| 485 | G | 0.026 | [6.2e-10,0.26] |
| 486 | L | 0.035 | [6.2e-10,0.26] |
| 487 | D | 0.023 | [6.2e-10,0.26] |
| 488 | F | 0.032 | [6.2e-10,0.26] |
| 489 | S | 0.035 | [6.2e-10,0.26] |
| 490 | D | 0.026 | [6.2e-10,0.26] |
| 491 | L | 0.035 | [6.2e-10,0.26] |
| 492 | $Y$ | 0.036 | [6.2e-10,0.26] |
| 493 | Y | 0.033 | [6.2e-10,0.26] |
| 494 | L | 0.035 | [6.2e-10,0.26] |
| 495 | T | 0.027 | [6.2e-10,0.26] |
| 496 | M | 0.018 | [6.2e-10,0.26] |
| 497 | N | 0.025 | [6.2e-10,0.26] |
| 498 | N | 0.025 | [6.2e-10,0.26] |
| 499 | K | 0.023 | [6.2e-10,0.26] |
| 500 | H | 0.032 | [6.2e-10,0.26] |
| 501 | W | 0.29 | [0.013,1] |
| 502 | L | 0.035 | [6.2e-10,0.26] |
| 503 | V | 0.024 | [6.2e-10,0.26] |
| 504 | H | 0.25 | [0.013,1] |
| 505 | K | 0.024 | [6.2e-10,0.26] |
| 506 | E | 0.022 | [6.2e-10,0.26] |
| 507 | W | 0.035 | [6.2e-10,0.26] |
| 508 | F | 0.031 | [6.2e-10,0.26] |
| 509 | H | 0.032 | [6.2e-10,0.26] |
| 510 | D | 0.023 | [6.2e-10,0.26] |
| 511 | 1 | 0.025 | [6.2e-10,0.26] |
| 512 | P | 0.032 | [6.2e-10,0.26] |
| 513 | L | 0.037 | [6.2e-10,0.26] |
| 514 | P | 0.036 | [6.2e-10,0.26] |
| 515 | W | 0.035 | [6.2e-10,0.26] |
| 516 | H | 0.033 | [6.2e-10,0.26] |


| 517 | A | 0.44 | [0.054,1] |
| :---: | :---: | :---: | :---: |
| 518 | G | 0.025 | [6.2e-10,0.26] |
| 519 | A | 0.025 | [6.2e-10,0.26] |
| 520 | D | 0.023 | [6.2e-10,0.26] |
| 521 | T | 0.027 | [6.2e-10,0.26] |
| 522 | G | 0.23 | [0.013,1] |
| 523 | T | 0.03 | [6.2e-10,0.26] |
| 524 | P | 0.032 | [6.2e-10,0.26] |
| 525 | H | 0.031 | [6.2e-10,0.26] |
| 526 | W | 0.035 | [6.2e-10,0.26] |
| 527 | N | 0.024 | [6.2e-10,0.26] |
| 528 | N | 0.024 | [6.2e-10,0.26] |
| 529 | K | 0.024 | [6.2e-10,0.26] |
| 530 | E | 0.023 | [6.2e-10,0.26] |
| 531 | A | 0.025 | [6.2e-10,0.26] |
| 532 | L | 0.035 | [6.2e-10,0.26] |
| 533 | V | 0.025 | [6.2e-10,0.26] |
| 534 | E | 0.022 | [6.2e-10,0.26] |
| 535 | F | 0.03 | [6.2e-10,0.26] |
| 536 | K | 0.023 | [6.2e-10,0.26] |
| 537 | D | 0.024 | [6.2e-10,0.26] |
| 538 | A | 0.026 | [6.2e-10,0.26] |
| 539 | H | 0.031 | [6.2e-10,0.26] |
| 540 | A | 0.026 | [6.2e-10,0.26] |
| 541 | K | 0.023 | [6.2e-10,0.26] |
| 542 | R | 0.023 | [6.2e-10,0.26] |
| 543 | Q | 0.035 | [6.2e-10,0.26] |
| 544 | T | 0.029 | [6.2e-10,0.26] |
| 545 | V | 0.026 | [6.2e-10,0.26] |
| 546 | V | 0.024 | [6.2e-10,0.26] |
| 547 | V | 0.029 | [6.2e-10,0.26] |
| 548 | L | 0.036 | [6.2e-10,0.26] |
| 549 | G | 0.024 | [6.2e-10,0.26] |
| 550 | S | 0.22 | [0.013,1] |
| 551 | Q | 0.034 | [6.2e-10,0.26] |
| 552 | E | 0.024 | [6.2e-10,0.26] |
| 553 | G | 0.027 | [6.2e-10,0.26] |
| 554 | A | 0.026 | [6.2e-10,0.26] |
| 555 | V | 0.029 | [6.2e-10,0.26] |
| 556 | H | 0.03 | [6.2e-10,0.26] |
| 557 | T | 0.024 | [6.2e-10,0.26] |
| 558 | A | 0.028 | [6.2e-10,0.26] |
| 559 | L | 0.034 | [6.2e-10,0.26] |
| 560 | A | 0.029 | [6.2e-10,0.26] |
| 561 | G | 0.027 | [6.2e-10,0.26] |
| 562 | A | 0.029 | [6.2e-10,0.26] |
| 563 | L | 0.035 | [6.2e-10,0.26] |


| 564 | E | 0.022 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 565 | A | 0.029 | [6.2e-10,0.26] |
| 566 | E | 0.022 | [6.2e-10,0.26] |
| 567 | M | 0.018 | [6.2e-10,0.26] |
| 568 | D | 0.026 | [6.2e-10,0.26] |
| 569 | G | 0.029 | [6.2e-10,0.26] |
| 570 | A | 0.025 | [6.2e-10,0.26] |
| 571 | K | 0.023 | [6.2e-10,0.26] |
| 572 | G | 0.027 | [6.2e-10,0.26] |
| 573 | R | 0.023 | [6.2e-10,0.26] |
| 574 | L | 0.036 | [6.2e-10,0.26] |
| 575 | S | 0.47 | [0.054,1] |
| 576 | S | 0.036 | [6.2e-10,0.26] |
| 577 | G | 0.026 | [6.2e-10,0.26] |
| 578 | H | 0.032 | [6.2e-10,0.26] |
| 579 | L | 0.035 | [6.2e-10,0.26] |
| 580 | K | 0.025 | [6.2e-10,0.26] |
| 581 | C | 0.033 | [6.2e-10,0.26] |
| 582 | R | 0.033 | [6.2e-10,0.26] |
| 583 | L | 0.036 | [6.2e-10,0.26] |
| 584 | K | 0.025 | [6.2e-10,0.26] |
| 585 | M | 0.018 | [6.2e-10,0.26] |
| 586 | D | 0.024 | [6.2e-10,0.26] |
| 587 | K | 0.023 | [6.2e-10,0.26] |
| 588 | L | 0.035 | [6.2e-10,0.26] |
| 589 | R | 0.025 | [6.2e-10,0.26] |
| 590 | L | 0.035 | [6.2e-10,0.26] |
| 591 | K | 0.023 | [6.2e-10,0.26] |
| 592 | G | 0.027 | [6.2e-10,0.26] |
| 593 | V | 0.023 | [6.2e-10,0.26] |
| 594 | S | 0.035 | [6.2e-10,0.26] |
| 595 | Y | 0.035 | [6.2e-10,0.26] |
| 596 | S | 0.033 | [6.2e-10,0.26] |
| 597 | L | 0.035 | [6.2e-10,0.26] |
| 598 | C | 0.034 | [6.2e-10,0.26] |
| 599 | T | 0.027 | [6.2e-10,0.26] |
| 600 | A | 0.025 | [6.2e-10,0.26] |
| 601 | A | 0.21 | [0.013,1] |
| 602 | F | 0.25 | [0.013,1] |
| 603 | T | 0.026 | [6.2e-10,0.26] |
| 604 | F | 0.49 | [0.054,1] |
| 605 | T | 0.23 | [0.013,1] |
| 606 | K | 0.023 | [6.2e-10,0.26] |
| 607 | 1 | 0.22 | [0.013,1] |
| 608 | P | 0.032 | [6.2e-10,0.26] |
| 609 | A | 0.029 | [6.2e-10,0.26] |
| 610 | E | 0.024 | [6.2e-10,0.26] |


| 611 | T | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 612 | L | 0.035 | [6.2e-10,0.26] |
| 613 | H | 0.032 | [6.2e-10,0.26] |
| 614 | G | 0.026 | [6.2e-10,0.26] |
| 615 | T | 0.026 | [6.2e-10,0.26] |
| 616 | V | 0.026 | [6.2e-10,0.26] |
| 617 | T | 0.026 | [6.2e-10,0.26] |
| 618 | V | 0.023 | [6.2e-10,0.26] |
| 619 | E | 0.022 | [6.2e-10,0.26] |
| 620 | v | 0.024 | [6.2e-10,0.26] |
| 621 | Q | 0.033 | [6.2e-10,0.26] |
| 622 | Y | 0.29 | [0.013,1] |
| 623 | A | 0.025 | [6.2e-10,0.26] |
| 624 | G | 0.024 | [6.2e-10,0.26] |
| 625 | T | 0.23 | [0.013,1] |
| 626 | D | 0.026 | [6.2e-10,0.26] |
| 627 | G | 0.027 | [6.2e-10,0.26] |
| 628 | P | 0.033 | [6.2e-10,0.26] |
| 629 | C | 0.032 | [6.2e-10,0.26] |
| 630 | K | 0.023 | [6.2e-10,0.26] |
| 631 | V | 0.23 | [0.013,1] |
| 632 | P | 0.032 | [6.2e-10,0.26] |
| 633 | A | 0.23 | [0.013,1] |
| 634 | Q | 0.033 | [6.2e-10,0.26] |
| 635 | M | 0.018 | [6.2e-10,0.26] |
| 636 | A | 0.023 | [6.2e-10,0.26] |
| 637 | V | 0.023 | [6.2e-10,0.26] |
| 638 | D | 0.023 | [6.2e-10,0.26] |
| 639 | M | 0.018 | [6.2e-10,0.26] |
| 640 | Q | 0.034 | [6.2e-10,0.26] |
| 641 | T | 0.027 | [6.2e-10,0.26] |
| 642 | L | 0.035 | [6.2e-10,0.26] |
| 643 | T | 0.026 | [6.2e-10,0.26] |
| 644 | P | 0.032 | [6.2e-10,0.26] |
| 645 | V | 0.028 | [6.2e-10,0.26] |
| 646 | G | 0.025 | [6.2e-10,0.26] |
| 647 | R | 0.023 | [6.2e-10,0.26] |
| 648 | L | 0.035 | [6.2e-10,0.26] |
| 649 | 1 | 0.02 | [6.2e-10,0.26] |
| 650 | T | 0.026 | [6.2e-10,0.26] |
| 651 | A | 0.027 | [6.2e-10,0.26] |
| 652 | N | 0.024 | [6.2e-10,0.26] |
| 653 | P | 0.035 | [6.2e-10,0.26] |
| 654 | V | 0.024 | [6.2e-10,0.26] |
| 655 | 1 | 0.025 | [6.2e-10,0.26] |
| 656 | T | 0.03 | [6.2e-10,0.26] |
| 657 | E | 0.024 | [6.2e-10,0.26] |


| 658 | S | 0.21 | [0.013,1] |
| :---: | :---: | :---: | :---: |
| 659 | T | 0.03 | [6.2e-10,0.26] |
| 660 | E | 0.022 | [6.2e-10,0.26] |
| 661 | N | 0.026 | [6.2e-10,0.26] |
| 662 | S | 0.035 | [6.2e-10,0.26] |
| 663 | K | 0.023 | [6.2e-10,0.26] |
| 664 | M | 0.018 | [6.2e-10,0.26] |
| 665 | M | 0.018 | [6.2e-10,0.26] |
| 666 | L | 0.035 | [6.2e-10,0.26] |
| 667 | E | 0.023 | [6.2e-10,0.26] |
| 668 | L | 0.033 | [6.2e-10,0.26] |
| 669 | D | 0.024 | [6.2e-10,0.26] |
| 670 | P | 0.032 | [6.2e-10,0.26] |
| 671 | P | 0.032 | [6.2e-10,0.26] |
| 672 | F | 0.033 | [6.2e-10,0.26] |
| 673 | G | 0.024 | [6.2e-10,0.26] |
| 674 | D | 0.025 | [6.2e-10,0.26] |
| 675 | S | 0.036 | [6.2e-10,0.26] |
| 676 | Y | 0.032 | [6.2e-10,0.26] |
| 677 | 1 | 0.027 | [6.2e-10,0.26] |
| 678 | V | 0.025 | [6.2e-10,0.26] |
| 679 | 1 | 0.02 | [6.2e-10,0.26] |
| 680 | G | 0.027 | [6.2e-10,0.26] |
| 681 | V | 0.027 | [6.2e-10,0.26] |
| 682 | G | 0.024 | [6.2e-10,0.26] |
| 683 | D | 0.21 | [0.013,1] |
| 684 | K | 0.023 | [6.2e-10,0.26] |
| 685 | K | 0.024 | [6.2e-10,0.26] |
| 686 | I | 0.024 | [6.2e-10,0.26] |
| 687 | T | 0.026 | [6.2e-10,0.26] |
| 688 | H | 0.031 | [6.2e-10,0.26] |
| 689 | H | 0.03 | [6.2e-10,0.26] |
| 690 | W | 0.035 | [6.2e-10,0.26] |
| 691 | X | 0.27 | [0.013,1] |
| 692 | R | 0.24 | [0.013,1] |
| 693 | S | 0.4 | [0.054,1] |
| 694 | G | 0.028 | [6.2e-10,0.26] |
| 695 | S | 0.024 | [6.2e-10,0.26] |
| 696 | T | 0.4 | [0.054,1] |
| 697 | 1 | 0.025 | [6.2e-10,0.26] |
| 698 | G | 0.027 | [6.2e-10,0.26] |
| 699 | K | 0.024 | [6.2e-10,0.26] |
| 700 | A | 0.025 | [6.2e-10,0.26] |
| 701 | F | 0.033 | [6.2e-10,0.26] |
| 702 | E | 0.024 | [6.2e-10,0.26] |
| 703 | A | 0.026 | [6.2e-10,0.26] |
| 704 | T | 0.03 | [6.2e-10,0.26] |


| 705 | V | 0.023 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 706 | R | 0.026 | [6.2e-10,0.26] |
| 707 | G | 0.029 | [6.2e-10,0.26] |
| 708 | A | 0.026 | [6.2e-10,0.26] |
| 709 | K | 0.023 | [6.2e-10,0.26] |
| 710 | R | 0.026 | [6.2e-10,0.26] |
| 711 | M | 0.018 | [6.2e-10,0.26] |
| 712 | A | 0.025 | [6.2e-10,0.26] |
| 713 | V | 0.026 | [6.2e-10,0.26] |
| 714 | L | 0.035 | [6.2e-10,0.26] |
| 715 | G | 0.025 | [6.2e-10,0.26] |
| 716 | D | 0.023 | [6.2e-10,0.26] |
| 717 | T | 0.026 | [6.2e-10,0.26] |
| 718 | A | 0.026 | [6.2e-10,0.26] |
| 719 | W | 0.035 | [6.2e-10,0.26] |
| 720 | D | 0.023 | [6.2e-10,0.26] |
| 721 | F | 0.032 | [6.2e-10,0.26] |
| 722 | G | 0.027 | [6.2e-10,0.26] |
| 723 | S | 0.035 | [6.2e-10,0.26] |
| 724 | V | 0.027 | [6.2e-10,0.26] |
| 725 | G | 0.025 | [6.2e-10,0.26] |
| 726 | G | 0.029 | [6.2e-10,0.26] |
| 727 | A | 0.38 | [0.054,1] |
| 728 | L | 0.26 | [0.013,1] |
| 729 | N | 0.024 | [6.2e-10,0.26] |
| 730 | S | 0.035 | [6.2e-10,0.26] |
| 731 | L | 0.035 | [6.2e-10,0.26] |
| 732 | G | 0.027 | [6.2e-10,0.26] |
| 733 | K | 0.023 | [6.2e-10,0.26] |
| 734 | G | 0.027 | [6.2e-10,0.26] |
| 735 | 1 | 0.39 | [0.054,1] |
| 736 | H | 0.031 | [6.2e-10,0.26] |
| 737 | Q | 0.034 | [6.2e-10,0.26] |
| 738 | I | 0.026 | [6.2e-10,0.26] |
| 739 | F | 0.033 | [6.2e-10,0.26] |
| 740 | G | 0.027 | [6.2e-10,0.26] |
| 741 | A | 0.025 | [6.2e-10,0.26] |
| 742 | A | 0.028 | [6.2e-10,0.26] |
| 743 | F | 0.03 | [6.2e-10,0.26] |
| 744 | K | 0.025 | [6.2e-10,0.26] |
| 745 | S | 0.035 | [6.2e-10,0.26] |
| 746 | L | 0.035 | [6.2e-10,0.26] |
| 747 | F | 0.032 | [6.2e-10,0.26] |
| 748 | G | 0.027 | [6.2e-10,0.26] |
| 749 | G | 0.027 | [6.2e-10,0.26] |
| 750 | M | 0.018 | [6.2e-10,0.26] |
| 751 | S | 0.033 | [6.2e-10,0.26] |


| 752 | W | 0.035 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 753 | F | 0.03 | [6.2e-10,0.26] |
| 754 | S | 0.035 | [6.2e-10,0.26] |
| 755 | Q | 0.034 | [6.2e-10,0.26] |
| 756 | । | 0.025 | [6.2e-10,0.26] |
| 757 | L | 0.032 | [6.2e-10,0.26] |
| 758 | 1 | 0.021 | [6.2e-10,0.26] |
| 759 | G | 0.026 | [6.2e-10,0.26] |
| 760 | T | 0.024 | [6.2e-10,0.26] |
| 761 | L | 0.035 | [6.2e-10,0.26] |
| 762 | L | 0.035 | [6.2e-10,0.26] |
| 763 | v | 0.2 | [0.013,1] |
| 764 | W | 0.035 | [6.2e-10,0.26] |
| 765 | L | 0.035 | [6.2e-10,0.26] |
| 766 | G | 0.029 | [6.2e-10,0.26] |
| 767 | L | 0.035 | [6.2e-10,0.26] |
| 768 | N | 0.024 | [6.2e-10,0.26] |
| 769 | T | 0.22 | [0.013,1] |
| 770 | K | 0.023 | [6.2e-10,0.26] |
| 771 | N | 0.027 | [6.2e-10,0.26] |
| 772 | G | 0.027 | [6.2e-10,0.26] |
| 773 | S | 0.036 | [6.2e-10,0.26] |
| 774 | 1 | 0.025 | [6.2e-10,0.26] |
| 775 | S | 0.033 | [6.2e-10,0.26] |
| 776 | L | 0.033 | [6.2e-10,0.26] |
| 777 | T | 0.21 | [0.013,1] |
| 778 | C | 0.032 | [6.2e-10,0.26] |
| 779 | L | 0.035 | [6.2e-10,0.26] |
| 780 | A | 0.026 | [6.2e-10,0.26] |
| 781 | L | 0.036 | [6.2e-10,0.26] |
| 782 | G | 0.024 | [6.2e-10,0.26] |
| 783 | G | 0.027 | [6.2e-10,0.26] |
| 784 | V | 0.023 | [6.2e-10,0.26] |
| 785 | L | 0.2 | [0.013,0.26] |
| 786 | 1 | 0.024 | [6.2e-10,0.26] |
| 787 | F | 0.03 | [6.2e-10,0.26] |
| 788 | L | 0.035 | [6.2e-10,0.26] |
| 789 | S | 0.033 | [6.2e-10,0.26] |
| 790 | T | 0.025 | [6.2e-10,0.26] |
| 791 | A | 0.028 | [6.2e-10,0.26] |
| 792 | V | 0.027 | [6.2e-10,0.26] |
| 793 | S | 0.036 | [6.2e-10,0.26] |
| 794 | A | 0.029 | [6.2e-10,0.26] |
| 795 | D | 0.025 | [6.2e-10,0.26] |
| 796 | V | 0.024 | [6.2e-10,0.26] |
| 797 | G | 0.024 | [6.2e-10,0.26] |
| 798 | C | 0.032 | [6.2e-10,0.26] |


| 799 | S | 0.032 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 800 | V | 0.023 | [6.2e-10,0.26] |
| 801 | D | 0.023 | [6.2e-10,0.26] |
| 802 | F | 0.03 | [6.2e-10,0.26] |
| 803 | S | 0.035 | [6.2e-10,0.26] |
| 804 | K | 0.024 | [6.2e-10,0.26] |
| 805 | K | 0.37 | [0.054,1] |
| 806 | E | 0.024 | [6.2e-10,0.26] |
| 807 | T | 0.024 | [6.2e-10,0.26] |
| 808 | R | 0.026 | [6.2e-10,0.26] |
| 809 | C | 0.034 | [6.2e-10,0.26] |
| 810 | G | 0.027 | [6.2e-10,0.26] |
| 811 | T | 0.024 | [6.2e-10,0.26] |
| 812 | G | 0.024 | [6.2e-10,0.26] |
| 813 | V | 0.024 | [6.2e-10,0.26] |
| 814 | F | 0.03 | [6.2e-10,0.26] |
| 815 | V | 0.39 | [0.054,1] |
| 816 | Y | 0.034 | [6.2e-10,0.26] |
| 817 | N | 0.025 | [6.2e-10,0.26] |
| 818 | D | 0.024 | [6.2e-10,0.26] |
| 819 | V | 0.029 | [6.2e-10,0.26] |
| 820 | E | 0.21 | [0.013,1] |
| 821 | A | 0.026 | [6.2e-10,0.26] |
| 822 | W | 0.035 | [6.2e-10,0.26] |
| 823 | R | 0.023 | [6.2e-10,0.26] |
| 824 | D | 0.023 | [6.2e-10,0.26] |
| 825 | R | 0.028 | [6.2e-10,0.26] |
| 826 | Y | 0.032 | [6.2e-10,0.26] |
| 827 | K | 0.2 | [0.013,1] |
| 828 | Y | 0.033 | [6.2e-10,0.26] |
| 829 | H | 0.033 | [6.2e-10,0.26] |
| 830 | P | 0.036 | [6.2e-10,0.26] |
| 831 | D | 0.023 | [6.2e-10,0.26] |
| 832 | S | 0.033 | [6.2e-10,0.26] |
| 833 | P | 0.034 | [6.2e-10,0.26] |
| 834 | R | 0.034 | [6.2e-10,0.26] |
| 835 | R | 0.026 | [6.2e-10,0.26] |
| 836 | L | 0.035 | [6.2e-10,0.26] |
| 837 | A | 0.025 | [6.2e-10,0.26] |
| 838 | A | 0.025 | [6.2e-10,0.26] |
| 839 | A | 0.22 | [0.013,1] |
| 840 | V | 0.026 | [6.2e-10,0.26] |
| 841 | K | 0.023 | [6.2e-10,0.26] |
| 842 | Q | 0.034 | [6.2e-10,0.26] |
| 843 | A | 0.027 | [6.2e-10,0.26] |
| 844 | W | 0.035 | [6.2e-10,0.26] |
| 845 | E | 0.024 | [6.2e-10,0.26] |


| 846 | D | 0.21 | [0.013,1] |
| :---: | :---: | :---: | :---: |
| 847 | G | 0.024 | [6.2e-10,0.26] |
| 848 | 1 | 0.026 | [6.2e-10,0.26] |
| 849 | C | 0.035 | [6.2e-10,0.26] |
| 850 | G | 0.024 | [6.2e-10,0.26] |
| 851 | 1 | 0.024 | [6.2e-10,0.26] |
| 852 | S | 0.033 | [6.2e-10,0.26] |
| 853 | S | 0.034 | [6.2e-10,0.26] |
| 854 | V | 0.029 | [6.2e-10,0.26] |
| 855 | S | 0.034 | [6.2e-10,0.26] |
| 856 | R | 0.026 | [6.2e-10,0.26] |
| 857 | M | 0.018 | [6.2e-10,0.26] |
| 858 | E | 0.024 | [6.2e-10,0.26] |
| 859 | N | 0.024 | [6.2e-10,0.26] |
| 860 | I | 0.024 | [6.2e-10,0.26] |
| 861 | M | 0.018 | [6.2e-10,0.26] |
| 862 | W | 0.035 | [6.2e-10,0.26] |
| 863 | R | 0.22 | [0.013,1] |
| 864 | S | 0.035 | [6.2e-10,0.26] |
| 865 | V | 0.024 | [6.2e-10,0.26] |
| 866 | E | 0.024 | [6.2e-10,0.26] |
| 867 | G | 0.024 | [6.2e-10,0.26] |
| 868 | E | 0.022 | [6.2e-10,0.26] |
| 869 | L | 0.032 | [6.2e-10,0.26] |
| 870 | N | 0.025 | [6.2e-10,0.26] |
| 871 | A | 0.026 | [6.2e-10,0.26] |
| 872 | I | 0.024 | [6.2e-10,0.26] |
| 873 | L | 0.036 | [6.2e-10,0.26] |
| 874 | E | 0.023 | [6.2e-10,0.26] |
| 875 | E | 0.022 | [6.2e-10,0.26] |
| 876 | N | 0.027 | [6.2e-10,0.26] |
| 877 | G | 0.027 | [6.2e-10,0.26] |
| 878 | V | 0.028 | [6.2e-10,0.26] |
| 879 | Q | 0.035 | [6.2e-10,0.26] |
| 880 | L | 0.035 | [6.2e-10,0.26] |
| 881 | T | 0.025 | [6.2e-10,0.26] |
| 882 | V | 0.028 | [6.2e-10,0.26] |
| 883 | V | 0.028 | [6.2e-10,0.26] |
| 884 | V | 0.024 | [6.2e-10,0.26] |
| 885 | G | 0.026 | [6.2e-10,0.26] |
| 886 | S | 0.036 | [6.2e-10,0.26] |
| 887 | V | 0.025 | [6.2e-10,0.26] |
| 888 | K | 0.025 | [6.2e-10,0.26] |
| 889 | N | 0.024 | [6.2e-10,0.26] |
| 890 | P | 0.033 | [6.2e-10,0.26] |
| 891 | M | 0.018 | [6.2e-10,0.26] |
| 892 | W | 0.035 | [6.2e-10,0.26] |


| 893 | R | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 894 | G | 0.25 | [0.013,1] |
| 895 | P | 0.032 | [6.2e-10,0.26] |
| 896 | Q | 0.29 | [0.013,1] |
| 897 | R | 0.026 | [6.2e-10,0.26] |
| 898 | L | 0.035 | [6.2e-10,0.26] |
| 899 | P | 0.033 | [6.2e-10,0.26] |
| 900 | V | 0.023 | [6.2e-10,0.26] |
| 901 | P | 0.035 | [6.2e-10,0.26] |
| 902 | V | 0.024 | [6.2e-10,0.26] |
| 903 | N | 0.026 | [6.2e-10,0.26] |
| 904 | E | 0.21 | [0.013,1] |
| 905 | L | 0.035 | [6.2e-10,0.26] |
| 906 | P | 0.033 | [6.2e-10,0.26] |
| 907 | H | 0.032 | [6.2e-10,0.26] |
| 908 | G | 0.026 | [6.2e-10,0.26] |
| 909 | W | 0.035 | [6.2e-10,0.26] |
| 910 | K | 0.024 | [6.2e-10,0.26] |
| 911 | A | 0.026 | [6.2e-10,0.26] |
| 912 | W | 0.035 | [6.2e-10,0.26] |
| 913 | G | 0.024 | [6.2e-10,0.26] |
| 914 | K | 0.025 | [6.2e-10,0.26] |
| 915 | S | 0.032 | [6.2e-10,0.26] |
| 916 | Y | 0.28 | [0.013,1] |
| 917 | F | 0.032 | [6.2e-10,0.26] |
| 918 | V | 0.026 | [6.2e-10,0.26] |
| 919 | R | 0.025 | [6.2e-10,0.26] |
| 920 | A | 0.024 | [6.2e-10,0.26] |
| 921 | A | 0.025 | [6.2e-10,0.26] |
| 922 | K | 0.023 | [6.2e-10,0.26] |
| 923 | T | 0.026 | [6.2e-10,0.26] |
| 924 | N | 0.024 | [6.2e-10,0.26] |
| 925 | N | 0.024 | [6.2e-10,0.26] |
| 926 | S | 0.22 | [0.013,1] |
| 927 | F | 0.033 | [6.2e-10,0.26] |
| 928 | V | 0.028 | [6.2e-10,0.26] |
| 929 | V | 0.025 | [6.2e-10,0.26] |
| 930 | D | 0.024 | [6.2e-10,0.26] |
| 931 | G | 0.029 | [6.2e-10,0.26] |
| 932 | D | 0.023 | [6.2e-10,0.26] |
| 933 | T | 0.026 | [6.2e-10,0.26] |
| 934 | L | 0.035 | [6.2e-10,0.26] |
| 935 | K | 0.023 | [6.2e-10,0.26] |
| 936 | E | 0.024 | [6.2e-10,0.26] |
| 937 | C | 0.034 | [6.2e-10,0.26] |
| 938 | P | 0.031 | [6.2e-10,0.26] |
| 939 | L | 0.032 | [6.2e-10,0.26] |


| 940 | K | 0.36 | [0.054,1] |
| :---: | :---: | :---: | :---: |
| 941 | H | 0.032 | [6.2e-10,0.26] |
| 942 | R | 0.026 | [6.2e-10,0.26] |
| 943 | A | 0.025 | [6.2e-10,0.26] |
| 944 | W | 0.035 | [6.2e-10,0.26] |
| 945 | N | 0.025 | [6.2e-10,0.26] |
| 946 | S | 0.025 | [6.2e-10,0.26] |
| 947 | F | 0.031 | [6.2e-10,0.26] |
| 948 | L | 0.035 | [6.2e-10,0.26] |
| 949 | V | 0.023 | [6.2e-10,0.26] |
| 950 | E | 0.022 | [6.2e-10,0.26] |
| 951 | D | 0.026 | [6.2e-10,0.26] |
| 952 | H | 0.031 | [6.2e-10,0.26] |
| 953 | G | 0.024 | [6.2e-10,0.26] |
| 954 | F | 0.031 | [6.2e-10,0.26] |
| 955 | G | 0.024 | [6.2e-10,0.26] |
| 956 | V | 0.23 | [0.013,1] |
| 957 | F | 0.031 | [6.2e-10,0.26] |
| 958 | H | 0.03 | [6.2e-10,0.26] |
| 959 | T | 0.027 | [6.2e-10,0.26] |
| 960 | S | 0.027 | [6.2e-10,0.26] |
| 961 | V | 0.028 | [6.2e-10,0.26] |
| 962 | W | 0.035 | [6.2e-10,0.26] |
| 963 | L | 0.034 | [6.2e-10,0.26] |
| 964 | K | 0.023 | [6.2e-10,0.26] |
| 965 | V | 0.027 | [6.2e-10,0.26] |
| 966 | R | 0.026 | [6.2e-10,0.26] |
| 967 | E | 0.023 | [6.2e-10,0.26] |
| 968 | D | 0.025 | [6.2e-10,0.26] |
| 969 | Y | 0.033 | [6.2e-10,0.26] |
| 970 | S | 0.035 | [6.2e-10,0.26] |
| 971 | L | 0.037 | [6.2e-10,0.26] |
| 972 | E | 0.023 | [6.2e-10,0.26] |
| 973 | C | 0.035 | [6.2e-10,0.26] |
| 974 | D | 0.024 | [6.2e-10,0.26] |
| 975 | P | 0.032 | [6.2e-10,0.26] |
| 976 | A | 0.026 | [6.2e-10,0.26] |
| 977 | V | 0.026 | [6.2e-10,0.26] |
| 978 | 1 | 0.021 | [6.2e-10,0.26] |
| 979 | G | 0.027 | [6.2e-10,0.26] |
| 980 | T | 0.026 | [6.2e-10,0.26] |
| 981 | A | 0.029 | [6.2e-10,0.26] |
| 982 | A | 0.43 | [0.054,1] |
| 983 | K | 0.023 | [6.2e-10,0.26] |
| 984 | G | 0.027 | [6.2e-10,0.26] |
| 985 | K | 0.2 | [0.013,1] |
| 986 | E | 0.023 | [6.2e-10,0.26] |


| 987 | A | 0.027 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 988 | V | 0.21 | [0.013,1] |
| 989 | H | 0.03 | [6.2e-10,0.26] |
| 990 | S | 0.027 | [6.2e-10,0.26] |
| 991 | D | 0.026 | [6.2e-10,0.26] |
| 992 | L | 0.037 | [6.2e-10,0.26] |
| 993 | G | 0.23 | [0.013,1] |
| 994 | Y | 0.034 | [6.2e-10,0.26] |
| 995 | W | 0.035 | [6.2e-10,0.26] |
| 996 | I | 0.027 | [6.2e-10,0.26] |
| 997 | E | 0.023 | [6.2e-10,0.26] |
| 998 | S | 0.027 | [6.2e-10,0.26] |
| 999 | E | 0.024 | [6.2e-10,0.26] |
| 1000 | K | 0.023 | [6.2e-10,0.26] |
| 1001 | N | 0.026 | [6.2e-10,0.26] |
| 1002 | D | 0.023 | [6.2e-10,0.26] |
| 1003 | T | 0.026 | [6.2e-10,0.26] |
| 1004 | W | 0.035 | [6.2e-10,0.26] |
| 1005 | R | 0.023 | [6.2e-10,0.26] |
| 1006 | L | 0.035 | [6.2e-10,0.26] |
| 1007 | K | 0.36 | [0.054,1] |
| 1008 | R | 0.023 | [6.2e-10,0.26] |
| 1009 | A | 0.027 | [6.2e-10,0.26] |
| 1010 | H | 0.031 | [6.2e-10,0.26] |
| 1011 | L | 0.035 | [6.2e-10,0.26] |
| 1012 | 1 | 0.026 | [6.2e-10,0.26] |
| 1013 | E | 0.022 | [6.2e-10,0.26] |
| 1014 | M | 0.018 | [6.2e-10,0.26] |
| 1015 | K | 0.025 | [6.2e-10,0.26] |
| 1016 | T | 0.026 | [6.2e-10,0.26] |
| 1017 | C | 0.035 | [6.2e-10,0.26] |
| 1018 | E | 0.023 | [6.2e-10,0.26] |
| 1019 | W | 0.035 | [6.2e-10,0.26] |
| 1020 | P | 0.032 | [6.2e-10,0.26] |
| 1021 | K | 0.023 | [6.2e-10,0.26] |
| 1022 | S | 0.035 | [6.2e-10,0.26] |
| 1023 | H | 0.03 | [6.2e-10,0.26] |
| 1024 | T | 0.026 | [6.2e-10,0.26] |
| 1025 | L | 0.035 | [6.2e-10,0.26] |
| 1026 | W | 0.035 | [6.2e-10,0.26] |
| 1027 | T | 0.22 | [0.013,1] |
| 1028 | D | 0.026 | [6.2e-10,0.26] |
| 1029 | G | 0.027 | [6.2e-10,0.26] |
| 1030 | 1 | 0.34 | [0.054,1] |
| 1031 | E | 0.024 | [6.2e-10,0.26] |
| 1032 | E | 0.024 | [6.2e-10,0.26] |
| 1033 | S | 0.027 | [6.2e-10,0.26] |


| 1034 | D | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1035 | L | 0.035 | [6.2e-10,0.26] |
| 1036 | 1 | 0.024 | [6.2e-10,0.26] |
| 1037 | 1 | 0.02 | [6.2e-10,0.26] |
| 1038 | P | 0.033 | [6.2e-10,0.26] |
| 1039 | K | 0.023 | [6.2e-10,0.26] |
| 1040 | S | 0.035 | [6.2e-10,0.26] |
| 1041 | L | 0.037 | [6.2e-10,0.26] |
| 1042 | A | 0.029 | [6.2e-10,0.26] |
| 1043 | G | 0.027 | [6.2e-10,0.26] |
| 1044 | P | 0.032 | [6.2e-10,0.26] |
| 1045 | L | 0.032 | [6.2e-10,0.26] |
| 1046 | S | 0.024 | [6.2e-10,0.26] |
| 1047 | H | 0.031 | [6.2e-10,0.26] |
| 1048 | H | 0.03 | [6.2e-10,0.26] |
| 1049 | N | 0.024 | [6.2e-10,0.26] |
| 1050 | T | 0.026 | [6.2e-10,0.26] |
| 1051 | R | 0.026 | [6.2e-10,0.26] |
| 1052 | E | 0.022 | [6.2e-10,0.26] |
| 1053 | G | 0.028 | [6.2e-10,0.26] |
| 1054 | Y | 0.033 | [6.2e-10,0.26] |
| 1055 | R | 0.025 | [6.2e-10,0.26] |
| 1056 | T | 0.029 | [6.2e-10,0.26] |
| 1057 | Q | 0.035 | [6.2e-10,0.26] |
| 1058 | V | 0.57 | [0.26,1] |
| 1059 | K | 0.025 | [6.2e-10,0.26] |
| 1060 | G | 0.024 | [6.2e-10,0.26] |
| 1061 | P | 0.032 | [6.2e-10,0.26] |
| 1062 | W | 0.035 | [6.2e-10,0.26] |
| 1063 | H | 0.032 | [6.2e-10,0.26] |
| 1064 | S | 0.027 | [6.2e-10,0.26] |
| 1065 | E | 0.024 | [6.2e-10,0.26] |
| 1066 | E | 0.022 | [6.2e-10,0.26] |
| 1067 | L | 0.035 | [6.2e-10,0.26] |
| 1068 | E | 0.024 | [6.2e-10,0.26] |
| 1069 | 1 | 0.025 | [6.2e-10,0.26] |
| 1070 | R | 0.033 | [6.2e-10,0.26] |
| 1071 | F | 0.033 | [6.2e-10,0.26] |
| 1072 | E | 0.022 | [6.2e-10,0.26] |
| 1073 | E | 0.024 | [6.2e-10,0.26] |
| 1074 | C | 0.034 | [6.2e-10,0.26] |
| 1075 | P | 0.032 | [6.2e-10,0.26] |
| 1076 | G | 0.026 | [6.2e-10,0.26] |
| 1077 | T | 0.027 | [6.2e-10,0.26] |
| 1078 | K | 0.023 | [6.2e-10,0.26] |
| 1079 | V | 0.028 | [6.2e-10,0.26] |
| 1080 | H | 0.46 | [0.054,1] |


| 1081 | V | 0.023 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1082 | E | 0.022 | [6.2e-10,0.26] |
| 1083 | E | 0.023 | [6.2e-10,0.26] |
| 1084 | T | 0.026 | [6.2e-10,0.26] |
| 1085 | C | 0.033 | [6.2e-10,0.26] |
| 1086 | G | 0.026 | [6.2e-10,0.26] |
| 1087 | T | 0.028 | [6.2e-10,0.26] |
| 1088 | R | 0.026 | [6.2e-10,0.26] |
| 1089 | G | 0.027 | [6.2e-10,0.26] |
| 1090 | P | 0.032 | [6.2e-10,0.26] |
| 1091 | S | 0.036 | [6.2e-10,0.26] |
| 1092 | L | 0.035 | [6.2e-10,0.26] |
| 1093 | R | 0.026 | [6.2e-10,0.26] |
| 1094 | S | 0.035 | [6.2e-10,0.26] |
| 1095 | T | 0.027 | [6.2e-10,0.26] |
| 1096 | T | 0.03 | [6.2e-10,0.26] |
| 1097 | A | 0.025 | [6.2e-10,0.26] |
| 1098 | S | 0.026 | [6.2e-10,0.26] |
| 1099 | G | 0.027 | [6.2e-10,0.26] |
| 1100 | R | 0.023 | [6.2e-10,0.26] |
| 1101 | V | 0.025 | [6.2e-10,0.26] |
| 1102 | 1 | 0.025 | [6.2e-10,0.26] |
| 1103 | E | 0.022 | [6.2e-10,0.26] |
| 1104 | E | 0.024 | [6.2e-10,0.26] |
| 1105 | W | 0.035 | [6.2e-10,0.26] |
| 1106 | C | 0.032 | [6.2e-10,0.26] |
| 1107 | C | 0.034 | [6.2e-10,0.26] |
| 1108 | R | 0.024 | [6.2e-10,0.26] |
| 1109 | E | 0.024 | [6.2e-10,0.26] |
| 1110 | C | 0.032 | [6.2e-10,0.26] |
| 1111 | T | 0.026 | [6.2e-10,0.26] |
| 1112 | M | 0.018 | [6.2e-10,0.26] |
| 1113 | P | 0.033 | [6.2e-10,0.26] |
| 1114 | P | 0.032 | [6.2e-10,0.26] |
| 1115 | L | 0.036 | [6.2e-10,0.26] |
| 1116 | S | 0.032 | [6.2e-10,0.26] |
| 1117 | F | 0.031 | [6.2e-10,0.26] |
| 1118 | R | 0.29 | [0.013,1] |
| 1119 | A | 0.026 | [6.2e-10,0.26] |
| 1120 | K | 0.025 | [6.2e-10,0.26] |
| 1121 | D | 0.024 | [6.2e-10,0.26] |
| 1122 | G | 0.026 | [6.2e-10,0.26] |
| 1123 | C | 0.033 | [6.2e-10,0.26] |
| 1124 | W | 0.035 | [6.2e-10,0.26] |
| 1125 | Y | 0.036 | [6.2e-10,0.26] |
| 1126 | G | 0.027 | [6.2e-10,0.26] |
| 1127 | M | 0.018 | [6.2e-10,0.26] |


| 1128 | E | 0.022 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1129 | I | 0.02 | [6.2e-10,0.26] |
| 1130 | R | 0.023 | [6.2e-10,0.26] |
| 1131 | P | 0.033 | [6.2e-10,0.26] |
| 1132 | R | 0.024 | [6.2e-10,0.26] |
| 1133 | K | 0.024 | [6.2e-10,0.26] |
| 1134 | E | 0.024 | [6.2e-10,0.26] |
| 1135 | P | 0.032 | [6.2e-10,0.26] |
| 1136 | E | 0.023 | [6.2e-10,0.26] |
| 1137 | S | 0.025 | [6.2e-10,0.26] |
| 1138 | N | 0.024 | [6.2e-10,0.26] |
| 1139 | L | 0.037 | [6.2e-10,0.26] |
| 1140 | V | 0.024 | [6.2e-10,0.26] |
| 1141 | R | 0.023 | [6.2e-10,0.26] |
| 1142 | S | 0.035 | [6.2e-10,0.26] |
| 1143 | M | 0.17 | [0.013,0.26] |
| 1144 | V | 0.023 | [6.2e-10,0.26] |
| 1145 | T | 0.027 | [6.2e-10,0.26] |
| 1146 | A | 0.025 | [6.2e-10,0.26] |
| 1147 | G | 0.026 | [6.2e-10,0.26] |
| 1148 | S | 0.035 | [6.2e-10,0.26] |
| 1149 | T | 0.027 | [6.2e-10,0.26] |
| 1150 | D | 0.026 | [6.2e-10,0.26] |
| 1151 | H | 0.031 | [6.2e-10,0.26] |
| 1152 | M | 0.018 | [6.2e-10,0.26] |
| 1153 | D | 0.025 | [6.2e-10,0.26] |
| 1154 | H | 0.03 | [6.2e-10,0.26] |
| 1155 | F | 0.03 | [6.2e-10,0.26] |
| 1156 | S | 0.035 | [6.2e-10,0.26] |
| 1157 | L | 0.035 | [6.2e-10,0.26] |
| 1158 | G | 0.027 | [6.2e-10,0.26] |
| 1159 | V | 0.023 | [6.2e-10,0.26] |
| 1160 | L | 0.035 | [6.2e-10,0.26] |
| 1161 | V | 0.023 | [6.2e-10,0.26] |
| 1162 | I | 0.027 | [6.2e-10,0.26] |
| 1163 | L | 0.036 | [6.2e-10,0.26] |
| 1164 | L | 0.032 | [6.2e-10,0.26] |
| 1165 | M | 0.018 | [6.2e-10,0.26] |
| 1166 | V | 0.023 | [6.2e-10,0.26] |
| 1167 | Q | 0.033 | [6.2e-10,0.26] |
| 1168 | E | 0.024 | [6.2e-10,0.26] |
| 1169 | G | 0.025 | [6.2e-10,0.26] |
| 1170 | L | 0.035 | [6.2e-10,0.26] |
| 1171 | K | 0.023 | [6.2e-10,0.26] |
| 1172 | K | 0.023 | [6.2e-10,0.26] |
| 1173 | R | 0.026 | [6.2e-10,0.26] |
| 1174 | M | 0.018 | [6.2e-10,0.26] |


| 1175 | T | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1176 | T | 0.026 | [6.2e-10,0.26] |
| 1177 | K | 0.023 | [6.2e-10,0.26] |
| 1178 | 1 | 0.024 | [6.2e-10,0.26] |
| 1179 | 1 | 0.024 | [6.2e-10,0.26] |
| 1180 | 1 | 0.28 | [0.054,1] |
| 1181 | S | 0.024 | [6.2e-10,0.26] |
| 1182 | T | 0.026 | [6.2e-10,0.26] |
| 1183 | S | 0.035 | [6.2e-10,0.26] |
| 1184 | M | 0.018 | [6.2e-10,0.26] |
| 1185 | A | 0.025 | [6.2e-10,0.26] |
| 1186 | V | 0.21 | [0.013,1] |
| 1187 | L | 0.035 | [6.2e-10,0.26] |
| 1188 | V | 0.025 | [6.2e-10,0.26] |
| 1189 | A | 0.23 | [0.013,1] |
| 1190 | M | 0.018 | [6.2e-10,0.26] |
| 1191 | 1 | 0.22 | [0.013,1] |
| 1192 | L | 0.035 | [6.2e-10,0.26] |
| 1193 | G | 0.027 | [6.2e-10,0.26] |
| 1194 | G | 0.027 | [6.2e-10,0.26] |
| 1195 | F | 0.032 | [6.2e-10,0.26] |
| 1196 | S | 0.29 | [0.013,1] |
| 1197 | M | 0.018 | [6.2e-10,0.26] |
| 1198 | S | 0.027 | [6.2e-10,0.26] |
| 1199 | D | 0.023 | [6.2e-10,0.26] |
| 1200 | L | 0.035 | [6.2e-10,0.26] |
| 1201 | A | 0.029 | [6.2e-10,0.26] |
| 1202 | K | 0.023 | [6.2e-10,0.26] |
| 1203 | L | 0.035 | [6.2e-10,0.26] |
| 1204 | A | 0.21 | [0.013,1] |
| 1205 | 1 | 0.025 | [6.2e-10,0.26] |
| 1206 | L | 0.035 | [6.2e-10,0.26] |
| 1207 | M | 0.018 | [6.2e-10,0.26] |
| 1208 | G | 0.03 | [6.2e-10,0.26] |
| 1209 | A | 0.026 | [6.2e-10,0.26] |
| 1210 | T | 0.028 | [6.2e-10,0.26] |
| 1211 | F | 0.03 | [6.2e-10,0.26] |
| 1212 | A | 0.025 | [6.2e-10,0.26] |
| 1213 | E | 0.024 | [6.2e-10,0.26] |
| 1214 | M | 0.018 | [6.2e-10,0.26] |
| 1215 | N | 0.024 | [6.2e-10,0.26] |
| 1216 | T | 0.03 | [6.2e-10,0.26] |
| 1217 | G | 0.027 | [6.2e-10,0.26] |
| 1218 | G | 0.027 | [6.2e-10,0.26] |
| 1219 | D | 0.026 | [6.2e-10,0.26] |
| 1220 | V | 0.024 | [6.2e-10,0.26] |
| 1221 | A | 0.029 | [6.2e-10,0.26] |


| 1222 | H | 0.031 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1223 | L | 0.035 | [6.2e-10,0.26] |
| 1224 | A | 0.025 | [6.2e-10,0.26] |
| 1225 | L | 0.035 | [6.2e-10,0.26] |
| 1226 | I | 0.57 | [0.26,1] |
| 1227 | A | 0.023 | [6.2e-10,0.26] |
| 1228 | A | 0.025 | [6.2e-10,0.26] |
| 1229 | F | 0.031 | [6.2e-10,0.26] |
| 1230 | K | 0.025 | [6.2e-10,0.26] |
| 1231 | V | 0.025 | [6.2e-10,0.26] |
| 1232 | R | 0.026 | [6.2e-10,0.26] |
| 1233 | P | 0.033 | [6.2e-10,0.26] |
| 1234 | A | 0.025 | [6.2e-10,0.26] |
| 1235 | L | 0.035 | [6.2e-10,0.26] |
| 1236 | L | 0.035 | [6.2e-10,0.26] |
| 1237 | V | 0.026 | [6.2e-10,0.26] |
| 1238 | S | 0.034 | [6.2e-10,0.26] |
| 1239 | F | 0.03 | [6.2e-10,0.26] |
| 1240 | 1 | 0.025 | [6.2e-10,0.26] |
| 1241 | F | 0.26 | [0.013,1] |
| 1242 | R | 0.026 | [6.2e-10,0.26] |
| 1243 | A | 0.026 | [6.2e-10,0.26] |
| 1244 | N | 0.026 | [6.2e-10,0.26] |
| 1245 | W | 0.035 | [6.2e-10,0.26] |
| 1246 | T | 0.026 | [6.2e-10,0.26] |
| 1247 | P | 0.033 | [6.2e-10,0.26] |
| 1248 | R | 0.036 | [6.2e-10,0.26] |
| 1249 | E | 0.022 | [6.2e-10,0.26] |
| 1250 | S | 0.024 | [6.2e-10,0.26] |
| 1251 | M | 0.018 | [6.2e-10,0.26] |
| 1252 | L | 0.035 | [6.2e-10,0.26] |
| 1253 | L | 0.036 | [6.2e-10,0.26] |
| 1254 | A | 0.026 | [6.2e-10,0.26] |
| 1255 | L | 0.035 | [6.2e-10,0.26] |
| 1256 | A | 0.028 | [6.2e-10,0.26] |
| 1257 | S | 0.032 | [6.2e-10,0.26] |
| 1258 | C | 0.035 | [6.2e-10,0.26] |
| 1259 | L | 0.28 | [0.013,1] |
| 1260 | L | 0.035 | [6.2e-10,0.26] |
| 1261 | Q | 0.035 | [6.2e-10,0.26] |
| 1262 | T | 0.03 | [6.2e-10,0.26] |
| 1263 | X | 0.024 | [6.2e-10,0.26] |
| 1264 | 1 | 0.024 | [6.2e-10,0.26] |
| 1265 | S | 0.034 | [6.2e-10,0.26] |
| 1266 | A | 0.028 | [6.2e-10,0.26] |
| 1267 | L | 0.035 | [6.2e-10,0.26] |
| 1268 | E | 0.024 | [6.2e-10,0.26] |


| 1269 | G | 0.027 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1270 | D | 0.2 | [0.013,0.26] |
| 1271 | L | 0.035 | [6.2e-10,0.26] |
| 1272 | M | 0.018 | [6.2e-10,0.26] |
| 1273 | V | 0.027 | [6.2e-10,0.26] |
| 1274 | L | 0.27 | [0.013,1] |
| 1275 | I | 0.4 | [0.054,1] |
| 1276 | N | 0.027 | [6.2e-10,0.26] |
| 1277 | G | 0.028 | [6.2e-10,0.26] |
| 1278 | F | 0.033 | [6.2e-10,0.26] |
| 1279 | A | 0.029 | [6.2e-10,0.26] |
| 1280 | L | 0.035 | [6.2e-10,0.26] |
| 1281 | A | 0.026 | [6.2e-10,0.26] |
| 1282 | W | 0.035 | [6.2e-10,0.26] |
| 1283 | L | 0.035 | [6.2e-10,0.26] |
| 1284 | A | 0.025 | [6.2e-10,0.26] |
| 1285 | 1 | 0.19 | [0.013,0.26] |
| 1286 | R | 0.04 | [6.2e-10,0.26] |
| 1287 | A | 0.025 | [6.2e-10,0.26] |
| 1288 | M | 0.018 | [6.2e-10,0.26] |
| 1289 | A | 0.23 | [0.013,1] |
| 1290 | V | 0.025 | [6.2e-10,0.26] |
| 1291 | P | 0.032 | [6.2e-10,0.26] |
| 1292 | R | 0.033 | [6.2e-10,0.26] |
| 1293 | T | 0.03 | [6.2e-10,0.26] |
| 1294 | D | 0.023 | [6.2e-10,0.26] |
| 1295 | N | 0.024 | [6.2e-10,0.26] |
| 1296 | 1 | 0.025 | [6.2e-10,0.26] |
| 1297 | T | 0.24 | [0.013,1] |
| 1298 | L | 0.036 | [6.2e-10,0.26] |
| 1299 | A | 0.22 | [0.013,1] |
| 1300 | I | 0.37 | [0.054,1] |
| 1301 | L | 0.035 | [6.2e-10,0.26] |
| 1302 | A | 0.24 | [0.013,1] |
| 1303 | A | 0.029 | [6.2e-10,0.26] |
| 1304 | L | 0.036 | [6.2e-10,0.26] |
| 1305 | T | 0.026 | [6.2e-10,0.26] |
| 1306 | P | 0.032 | [6.2e-10,0.26] |
| 1307 | L | 0.036 | [6.2e-10,0.26] |
| 1308 | A | 0.026 | [6.2e-10,0.26] |
| 1309 | R | 0.035 | [6.2e-10,0.26] |
| 1310 | G | 0.026 | [6.2e-10,0.26] |
| 1311 | T | 0.026 | [6.2e-10,0.26] |
| 1312 | L | 0.035 | [6.2e-10,0.26] |
| 1313 | L | 0.033 | [6.2e-10,0.26] |
| 1314 | V | 0.024 | [6.2e-10,0.26] |
| 1315 | A | 0.025 | [6.2e-10,0.26] |


| 1316 | W | 0.035 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1317 | R | 0.026 | [6.2e-10,0.26] |
| 1318 | A | 0.024 | [6.2e-10,0.26] |
| 1319 | G | 0.026 | [6.2e-10,0.26] |
| 1320 | L | 0.033 | [6.2e-10,0.26] |
| 1321 | A | 0.028 | [6.2e-10,0.26] |
| 1322 | T | 0.03 | [6.2e-10,0.26] |
| 1323 | C | 0.035 | [6.2e-10,0.26] |
| 1324 | G | 0.026 | [6.2e-10,0.26] |
| 1325 | G | 0.024 | [6.2e-10,0.26] |
| 1326 | F | 0.25 | [0.013,1] |
| 1327 | M | 0.018 | [6.2e-10,0.26] |
| 1328 | L | 0.032 | [6.2e-10,0.26] |
| 1329 | L | 0.27 | [0.013,1] |
| 1330 | S | 0.034 | [6.2e-10,0.26] |
| 1331 | L | 0.035 | [6.2e-10,0.26] |
| 1332 | K | 0.024 | [6.2e-10,0.26] |
| 1333 | G | 0.024 | [6.2e-10,0.26] |
| 1334 | K | 0.025 | [6.2e-10,0.26] |
| 1335 | G | 0.029 | [6.2e-10,0.26] |
| 1336 | S | 0.027 | [6.2e-10,0.26] |
| 1337 | V | 0.023 | [6.2e-10,0.26] |
| 1338 | K | 0.023 | [6.2e-10,0.26] |
| 1339 | K | 0.023 | [6.2e-10,0.26] |
| 1340 | N | 0.024 | [6.2e-10,0.26] |
| 1341 | L | 0.036 | [6.2e-10,0.26] |
| 1342 | P | 0.033 | [6.2e-10,0.26] |
| 1343 | F | 0.033 | [6.2e-10,0.26] |
| 1344 | V | 0.025 | [6.2e-10,0.26] |
| 1345 | M | 0.018 | [6.2e-10,0.26] |
| 1346 | A | 0.026 | [6.2e-10,0.26] |
| 1347 | L | 0.035 | [6.2e-10,0.26] |
| 1348 | G | 0.026 | [6.2e-10,0.26] |
| 1349 | L | 0.29 | [0.013,1] |
| 1350 | T | 0.22 | [0.013,1] |
| 1351 | A | 0.029 | [6.2e-10,0.26] |
| 1352 | V | 0.023 | [6.2e-10,0.26] |
| 1353 | R | 0.023 | [6.2e-10,0.26] |
| 1354 | L | 0.47 | [0.054,1] |
| 1355 | V | 0.025 | [6.2e-10,0.26] |
| 1356 | D | 0.023 | [6.2e-10,0.26] |
| 1357 | P | 0.033 | [6.2e-10,0.26] |
| 1358 | I | 0.026 | [6.2e-10,0.26] |
| 1359 | N | 0.025 | [6.2e-10,0.26] |
| 1360 | V | 0.023 | [6.2e-10,0.26] |
| 1361 | V | 0.024 | [6.2e-10,0.26] |
| 1362 | G | 0.027 | [6.2e-10,0.26] |


| 1363 | L | 0.036 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1364 | L | 0.035 | [6.2e-10,0.26] |
| 1365 | L | 0.036 | [6.2e-10,0.26] |
| 1366 | L | 0.032 | [6.2e-10,0.26] |
| 1367 | T | 0.026 | [6.2e-10,0.26] |
| 1368 | R | 0.024 | [6.2e-10,0.26] |
| 1369 | S | 0.027 | [6.2e-10,0.26] |
| 1370 | G | 0.024 | [6.2e-10,0.26] |
| 1371 | K | 0.023 | [6.2e-10,0.26] |
| 1372 | R | 0.033 | [6.2e-10,0.26] |
| 1373 | S | 0.024 | [6.2e-10,0.26] |
| 1374 | W | 0.035 | [6.2e-10,0.26] |
| 1375 | P | 0.033 | [6.2e-10,0.26] |
| 1376 | P | 0.036 | [6.2e-10,0.26] |
| 1377 | S | 0.027 | [6.2e-10,0.26] |
| 1378 | E | 0.024 | [6.2e-10,0.26] |
| 1379 | V | 0.025 | [6.2e-10,0.26] |
| 1380 | L | 0.033 | [6.2e-10,0.26] |
| 1381 | T | 0.026 | [6.2e-10,0.26] |
| 1382 | A | 0.029 | [6.2e-10,0.26] |
| 1383 | V | 0.029 | [6.2e-10,0.26] |
| 1384 | G | 0.026 | [6.2e-10,0.26] |
| 1385 | L | 0.035 | [6.2e-10,0.26] |
| 1386 | 1 | 0.02 | [6.2e-10,0.26] |
| 1387 | C | 0.035 | [6.2e-10,0.26] |
| 1388 | A | 0.025 | [6.2e-10,0.26] |
| 1389 | L | 0.035 | [6.2e-10,0.26] |
| 1390 | A | 0.026 | [6.2e-10,0.26] |
| 1391 | G | 0.027 | [6.2e-10,0.26] |
| 1392 | G | 0.024 | [6.2e-10,0.26] |
| 1393 | F | 0.031 | [6.2e-10,0.26] |
| 1394 | A | 0.026 | [6.2e-10,0.26] |
| 1395 | K | 0.023 | [6.2e-10,0.26] |
| 1396 | A | 0.025 | [6.2e-10,0.26] |
| 1397 | D | 0.024 | [6.2e-10,0.26] |
| 1398 | I | 0.022 | [6.2e-10,0.26] |
| 1399 | E | 0.022 | [6.2e-10,0.26] |
| 1400 | M | 0.018 | [6.2e-10,0.26] |
| 1401 | A | 0.029 | [6.2e-10,0.26] |
| 1402 | G | 0.024 | [6.2e-10,0.26] |
| 1403 | P | 0.033 | [6.2e-10,0.26] |
| 1404 | M | 0.018 | [6.2e-10,0.26] |
| 1405 | A | 0.028 | [6.2e-10,0.26] |
| 1406 | A | 0.025 | [6.2e-10,0.26] |
| 1407 | V | 0.026 | [6.2e-10,0.26] |
| 1408 | G | 0.027 | [6.2e-10,0.26] |
| 1409 | L | 0.035 | [6.2e-10,0.26] |


| 1410 | L | 0.037 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1411 | 1 | 0.027 | [6.2e-10,0.26] |
| 1412 | V | 0.026 | [6.2e-10,0.26] |
| 1413 | S | 0.027 | [6.2e-10,0.26] |
| 1414 | Y | 0.035 | [6.2e-10,0.26] |
| 1415 | V | 0.023 | [6.2e-10,0.26] |
| 1416 | V | 0.025 | [6.2e-10,0.26] |
| 1417 | S | 0.28 | [0.013,1] |
| 1418 | G | 0.027 | [6.2e-10,0.26] |
| 1419 | K | 0.023 | [6.2e-10,0.26] |
| 1420 | S | 0.027 | [6.2e-10,0.26] |
| 1421 | V | 0.023 | [6.2e-10,0.26] |
| 1422 | D | 0.023 | [6.2e-10,0.26] |
| 1423 | M | 0.018 | [6.2e-10,0.26] |
| 1424 | Y | 0.032 | [6.2e-10,0.26] |
| 1425 | I | 0.027 | [6.2e-10,0.26] |
| 1426 | E | 0.024 | [6.2e-10,0.26] |
| 1427 | R | 0.026 | [6.2e-10,0.26] |
| 1428 | A | 0.025 | [6.2e-10,0.26] |
| 1429 | G | 0.03 | [6.2e-10,0.26] |
| 1430 | D | 0.024 | [6.2e-10,0.26] |
| 1431 | 1 | 0.024 | [6.2e-10,0.26] |
| 1432 | T | 0.026 | [6.2e-10,0.26] |
| 1433 | W | 0.035 | [6.2e-10,0.26] |
| 1434 | E | 0.024 | [6.2e-10,0.26] |
| 1435 | K | 0.024 | [6.2e-10,0.26] |
| 1436 | D | 0.024 | [6.2e-10,0.26] |
| 1437 | A | 0.024 | [6.2e-10,0.26] |
| 1438 | E | 0.024 | [6.2e-10,0.26] |
| 1439 | V | 0.23 | [0.013,1] |
| 1440 | T | 0.03 | [6.2e-10,0.26] |
| 1441 | G | 0.027 | [6.2e-10,0.26] |
| 1442 | N | 0.024 | [6.2e-10,0.26] |
| 1443 | S | 0.027 | [6.2e-10,0.26] |
| 1444 | P | 0.034 | [6.2e-10,0.26] |
| 1445 | R | 0.033 | [6.2e-10,0.26] |
| 1446 | L | 0.034 | [6.2e-10,0.26] |
| 1447 | D | 0.024 | [6.2e-10,0.26] |
| 1448 | V | 0.023 | [6.2e-10,0.26] |
| 1449 | A | 0.025 | [6.2e-10,0.26] |
| 1450 | L | 0.037 | [6.2e-10,0.26] |
| 1451 | D | 0.026 | [6.2e-10,0.26] |
| 1452 | E | 0.022 | [6.2e-10,0.26] |
| 1453 | S | 0.027 | [6.2e-10,0.26] |
| 1454 | G | 0.03 | [6.2e-10,0.26] |
| 1455 | D | 0.026 | [6.2e-10,0.26] |
| 1456 | F | 0.03 | [6.2e-10,0.26] |


| 1457 | S | 0.033 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1458 | L | 0.035 | [6.2e-10,0.26] |
| 1459 | V | 0.024 | [6.2e-10,0.26] |
| 1460 | E | 0.022 | [6.2e-10,0.26] |
| 1461 | D | 0.21 | [0.013,1] |
| 1462 | D | 0.026 | [6.2e-10,0.26] |
| 1463 | G | 0.029 | [6.2e-10,0.26] |
| 1464 | P | 0.033 | [6.2e-10,0.26] |
| 1465 | P | 0.033 | [6.2e-10,0.26] |
| 1466 | M | 0.018 | [6.2e-10,0.26] |
| 1467 | R | 0.026 | [6.2e-10,0.26] |
| 1468 | E | 0.022 | [6.2e-10,0.26] |
| 1469 | I | 0.024 | [6.2e-10,0.26] |
| 1470 | 1 | 0.02 | [6.2e-10,0.26] |
| 1471 | L | 0.032 | [6.2e-10,0.26] |
| 1472 | K | 0.023 | [6.2e-10,0.26] |
| 1473 | V | 0.023 | [6.2e-10,0.26] |
| 1474 | V | 0.025 | [6.2e-10,0.26] |
| 1475 | L | 0.035 | [6.2e-10,0.26] |
| 1476 | M | 0.018 | [6.2e-10,0.26] |
| 1477 | T | 0.22 | [0.013,1] |
| 1478 | 1 | 0.024 | [6.2e-10,0.26] |
| 1479 | C | 0.035 | [6.2e-10,0.26] |
| 1480 | G | 0.026 | [6.2e-10,0.26] |
| 1481 | M | 0.018 | [6.2e-10,0.26] |
| 1482 | N | 0.024 | [6.2e-10,0.26] |
| 1483 | P | 0.032 | [6.2e-10,0.26] |
| 1484 | 1 | 0.02 | [6.2e-10,0.26] |
| 1485 | A | 0.026 | [6.2e-10,0.26] |
| 1486 | I | 0.02 | [6.2e-10,0.26] |
| 1487 | P | 0.033 | [6.2e-10,0.26] |
| 1488 | F | 0.032 | [6.2e-10,0.26] |
| 1489 | A | 0.028 | [6.2e-10,0.26] |
| 1490 | A | 0.027 | [6.2e-10,0.26] |
| 1491 | G | 0.027 | [6.2e-10,0.26] |
| 1492 | A | 0.023 | [6.2e-10,0.26] |
| 1493 | W | 0.035 | [6.2e-10,0.26] |
| 1494 | Y | 0.035 | [6.2e-10,0.26] |
| 1495 | V | 0.024 | [6.2e-10,0.26] |
| 1496 | Y | 0.036 | [6.2e-10,0.26] |
| 1497 | V | 0.024 | [6.2e-10,0.26] |
| 1498 | K | 0.023 | [6.2e-10,0.26] |
| 1499 | T | 0.03 | [6.2e-10,0.26] |
| 1500 | G | 0.025 | [6.2e-10,0.26] |
| 1501 | K | 0.024 | [6.2e-10,0.26] |
| 1502 | R | 0.023 | [6.2e-10,0.26] |
| 1503 | S | 0.027 | [6.2e-10,0.26] |


| 1504 | G | 0.029 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1505 | A | 0.027 | [6.2e-10,0.26] |
| 1506 | L | 0.034 | [6.2e-10,0.26] |
| 1507 | W | 0.035 | [6.2e-10,0.26] |
| 1508 | D | 0.025 | [6.2e-10,0.26] |
| 1509 | V | 0.023 | [6.2e-10,0.26] |
| 1510 | P | 0.036 | [6.2e-10,0.26] |
| 1511 | A | 0.029 | [6.2e-10,0.26] |
| 1512 | P | 0.033 | [6.2e-10,0.26] |
| 1513 | K | 0.024 | [6.2e-10,0.26] |
| 1514 | E | 0.024 | [6.2e-10,0.26] |
| 1515 | V | 0.024 | [6.2e-10,0.26] |
| 1516 | K | 0.024 | [6.2e-10,0.26] |
| 1517 | K | 0.024 | [6.2e-10,0.26] |
| 1518 | G | 0.026 | [6.2e-10,0.26] |
| 1519 | E | 0.022 | [6.2e-10,0.26] |
| 1520 | T | 0.027 | [6.2e-10,0.26] |
| 1521 | T | 0.026 | [6.2e-10,0.26] |
| 1522 | D | 0.026 | [6.2e-10,0.26] |
| 1523 | G | 0.026 | [6.2e-10,0.26] |
| 1524 | V | 0.024 | [6.2e-10,0.26] |
| 1525 | Y | 0.033 | [6.2e-10,0.26] |
| 1526 | R | 0.026 | [6.2e-10,0.26] |
| 1527 | V | 0.024 | [6.2e-10,0.26] |
| 1528 | M | 0.018 | [6.2e-10,0.26] |
| 1529 | T | 0.029 | [6.2e-10,0.26] |
| 1530 | R | 0.034 | [6.2e-10,0.26] |
| 1531 | R | 0.026 | [6.2e-10,0.26] |
| 1532 | L | 0.035 | [6.2e-10,0.26] |
| 1533 | L | 0.036 | [6.2e-10,0.26] |
| 1534 | G | 0.03 | [6.2e-10,0.26] |
| 1535 | S | 0.035 | [6.2e-10,0.26] |
| 1536 | T | 0.026 | [6.2e-10,0.26] |
| 1537 | Q | 0.034 | [6.2e-10,0.26] |
| 1538 | V | 0.029 | [6.2e-10,0.26] |
| 1539 | G | 0.027 | [6.2e-10,0.26] |
| 1540 | V | 0.023 | [6.2e-10,0.26] |
| 1541 | G | 0.026 | [6.2e-10,0.26] |
| 1542 | V | 0.026 | [6.2e-10,0.26] |
| 1543 | M | 0.018 | [6.2e-10,0.26] |
| 1544 | Q | 0.035 | [6.2e-10,0.26] |
| 1545 | E | 0.022 | [6.2e-10,0.26] |
| 1546 | G | 0.026 | [6.2e-10,0.26] |
| 1547 | V | 0.025 | [6.2e-10,0.26] |
| 1548 | F | 0.03 | [6.2e-10,0.26] |
| 1549 | H | 0.03 | [6.2e-10,0.26] |
| 1550 | T | 0.027 | [6.2e-10,0.26] |


| 1551 | M | 0.018 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1552 | W | 0.035 | [6.2e-10,0.26] |
| 1553 | H | 0.03 | [6.2e-10,0.26] |
| 1554 | V | 0.026 | [6.2e-10,0.26] |
| 1555 | T | 0.026 | [6.2e-10,0.26] |
| 1556 | K | 0.025 | [6.2e-10,0.26] |
| 1557 | G | 0.027 | [6.2e-10,0.26] |
| 1558 | S | 0.25 | [0.013,1] |
| 1559 | A | 0.025 | [6.2e-10,0.26] |
| 1560 | L | 0.035 | [6.2e-10,0.26] |
| 1561 | R | 0.024 | [6.2e-10,0.26] |
| 1562 | S | 0.024 | [6.2e-10,0.26] |
| 1563 | G | 0.03 | [6.2e-10,0.26] |
| 1564 | E | 0.024 | [6.2e-10,0.26] |
| 1565 | G | 0.025 | [6.2e-10,0.26] |
| 1566 | R | 0.026 | [6.2e-10,0.26] |
| 1567 | L | 0.035 | [6.2e-10,0.26] |
| 1568 | D | 0.026 | [6.2e-10,0.26] |
| 1569 | P | 0.032 | [6.2e-10,0.26] |
| 1570 | Y | 0.033 | [6.2e-10,0.26] |
| 1571 | W | 0.035 | [6.2e-10,0.26] |
| 1572 | G | 0.025 | [6.2e-10,0.26] |
| 1573 | D | 0.025 | [6.2e-10,0.26] |
| 1574 | V | 0.026 | [6.2e-10,0.26] |
| 1575 | K | 0.023 | [6.2e-10,0.26] |
| 1576 | Q | 0.033 | [6.2e-10,0.26] |
| 1577 | D | 0.024 | [6.2e-10,0.26] |
| 1578 | L | 0.035 | [6.2e-10,0.26] |
| 1579 | V | 0.023 | [6.2e-10,0.26] |
| 1580 | S | 0.035 | [6.2e-10,0.26] |
| 1581 | Y | 0.033 | [6.2e-10,0.26] |
| 1582 | C | 0.035 | [6.2e-10,0.26] |
| 1583 | G | 0.025 | [6.2e-10,0.26] |
| 1584 | P | 0.032 | [6.2e-10,0.26] |
| 1585 | W | 0.035 | [6.2e-10,0.26] |
| 1586 | K | 0.023 | [6.2e-10,0.26] |
| 1587 | L | 0.036 | [6.2e-10,0.26] |
| 1588 | D | 0.026 | [6.2e-10,0.26] |
| 1589 | A | 0.025 | [6.2e-10,0.26] |
| 1590 | A | 0.23 | [0.013,1] |
| 1591 | W | 0.035 | [6.2e-10,0.26] |
| 1592 | D | 0.025 | [6.2e-10,0.26] |
| 1593 | G | 0.026 | [6.2e-10,0.26] |
| 1594 | H | 0.29 | [0.013,1] |
| 1595 | S | 0.026 | [6.2e-10,0.26] |
| 1596 | E | 0.023 | [6.2e-10,0.26] |
| 1597 | V | 0.024 | [6.2e-10,0.26] |


| 1598 | Q | 0.033 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1599 | L | 0.034 | [6.2e-10,0.26] |
| 1600 | L | 0.035 | [6.2e-10,0.26] |
| 1601 | A | 0.026 | [6.2e-10,0.26] |
| 1602 | V | 0.025 | [6.2e-10,0.26] |
| 1603 | P | 0.033 | [6.2e-10,0.26] |
| 1604 | P | 0.033 | [6.2e-10,0.26] |
| 1605 | G | 0.027 | [6.2e-10,0.26] |
| 1606 | E | 0.022 | [6.2e-10,0.26] |
| 1607 | R | 0.024 | [6.2e-10,0.26] |
| 1608 | A | 0.026 | [6.2e-10,0.26] |
| 1609 | R | 0.22 | [0.013,1] |
| 1610 | N | 0.024 | [6.2e-10,0.26] |
| 1611 | 1 | 0.026 | [6.2e-10,0.26] |
| 1612 | Q | 0.033 | [6.2e-10,0.26] |
| 1613 | T | 0.029 | [6.2e-10,0.26] |
| 1614 | L | 0.29 | [0.013,1] |
| 1615 | P | 0.035 | [6.2e-10,0.26] |
| 1616 | G | 0.027 | [6.2e-10,0.26] |
| 1617 | 1 | 0.19 | [0.013,0.26] |
| 1618 | F | 0.03 | [6.2e-10,0.26] |
| 1619 | K | 0.023 | [6.2e-10,0.26] |
| 1620 | T | 0.026 | [6.2e-10,0.26] |
| 1621 | K | 0.023 | [6.2e-10,0.26] |
| 1622 | D | 0.026 | [6.2e-10,0.26] |
| 1623 | G | 0.024 | [6.2e-10,0.26] |
| 1624 | D | 0.023 | [6.2e-10,0.26] |
| 1625 | 1 | 0.025 | [6.2e-10,0.26] |
| 1626 | G | 0.027 | [6.2e-10,0.26] |
| 1627 | A | 0.025 | [6.2e-10,0.26] |
| 1628 | V | 0.029 | [6.2e-10,0.26] |
| 1629 | A | 0.028 | [6.2e-10,0.26] |
| 1630 | L | 0.036 | [6.2e-10,0.26] |
| 1631 | D | 0.023 | [6.2e-10,0.26] |
| 1632 | Y | 0.033 | [6.2e-10,0.26] |
| 1633 | P | 0.033 | [6.2e-10,0.26] |
| 1634 | A | 0.025 | [6.2e-10,0.26] |
| 1635 | G | 0.026 | [6.2e-10,0.26] |
| 1636 | T | 0.028 | [6.2e-10,0.26] |
| 1637 | S | 0.035 | [6.2e-10,0.26] |
| 1638 | G | 0.027 | [6.2e-10,0.26] |
| 1639 | S | 0.036 | [6.2e-10,0.26] |
| 1640 | P | 0.031 | [6.2e-10,0.26] |
| 1641 | 1 | 0.024 | [6.2e-10,0.26] |
| 1642 | L | 0.037 | [6.2e-10,0.26] |
| 1643 | D | 0.023 | [6.2e-10,0.26] |
| 1644 | K | 0.024 | [6.2e-10,0.26] |


| 1645 | C | 0.034 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1646 | G | 0.026 | [6.2e-10,0.26] |
| 1647 | R | 0.026 | [6.2e-10,0.26] |
| 1648 | V | 0.023 | [6.2e-10,0.26] |
| 1649 | 1 | 0.02 | [6.2e-10,0.26] |
| 1650 | G | 0.027 | [6.2e-10,0.26] |
| 1651 | L | 0.034 | [6.2e-10,0.26] |
| 1652 | Y | 0.036 | [6.2e-10,0.26] |
| 1653 | G | 0.026 | [6.2e-10,0.26] |
| 1654 | N | 0.027 | [6.2e-10,0.26] |
| 1655 | G | 0.024 | [6.2e-10,0.26] |
| 1656 | V | 0.028 | [6.2e-10,0.26] |
| 1657 | V | 0.023 | [6.2e-10,0.26] |
| 1658 | I | 0.024 | [6.2e-10,0.26] |
| 1659 | K | 0.023 | [6.2e-10,0.26] |
| 1660 | N | 0.027 | [6.2e-10,0.26] |
| 1661 | G | 0.026 | [6.2e-10,0.26] |
| 1662 | S | 0.025 | [6.2e-10,0.26] |
| 1663 | Y | 0.036 | [6.2e-10,0.26] |
| 1664 | V | 0.029 | [6.2e-10,0.26] |
| 1665 | S | 0.027 | [6.2e-10,0.26] |
| 1666 | A | 0.026 | [6.2e-10,0.26] |
| 1667 | 1 | 0.022 | [6.2e-10,0.26] |
| 1668 | T | 0.026 | [6.2e-10,0.26] |
| 1669 | Q | 0.034 | [6.2e-10,0.26] |
| 1670 | G | 0.026 | [6.2e-10,0.26] |
| 1671 | R | 0.21 | [0.013,1] |
| 1672 | R | 0.023 | [6.2e-10,0.26] |
| 1673 | E | 0.022 | [6.2e-10,0.26] |
| 1674 | E | 0.023 | [6.2e-10,0.26] |
| 1675 | E | 0.022 | [6.2e-10,0.26] |
| 1676 | T | 0.26 | [0.013,1] |
| 1677 | P | 0.033 | [6.2e-10,0.26] |
| 1678 | V | 0.029 | [6.2e-10,0.26] |
| 1679 | E | 0.023 | [6.2e-10,0.26] |
| 1680 | C | 0.033 | [6.2e-10,0.26] |
| 1681 | F | 0.03 | [6.2e-10,0.26] |
| 1682 | E | 0.024 | [6.2e-10,0.26] |
| 1683 | P | 0.034 | [6.2e-10,0.26] |
| 1684 | S | 0.032 | [6.2e-10,0.26] |
| 1685 | M | 0.018 | [6.2e-10,0.26] |
| 1686 | L | 0.035 | [6.2e-10,0.26] |
| 1687 | K | 0.21 | [0.013,1] |
| 1688 | K | 0.023 | [6.2e-10,0.26] |
| 1689 | K | 0.023 | [6.2e-10,0.26] |
| 1690 | Q | 0.033 | [6.2e-10,0.26] |
| 1691 | L | 0.037 | [6.2e-10,0.26] |


| 1692 | T | 0.029 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1693 | V | 0.025 | [6.2e-10,0.26] |
| 1694 | L | 0.035 | [6.2e-10,0.26] |
| 1695 | D | 0.025 | [6.2e-10,0.26] |
| 1696 | L | 0.035 | [6.2e-10,0.26] |
| 1697 | H | 0.033 | [6.2e-10,0.26] |
| 1698 | P | 0.034 | [6.2e-10,0.26] |
| 1699 | G | 0.027 | [6.2e-10,0.26] |
| 1700 | A | 0.027 | [6.2e-10,0.26] |
| 1701 | G | 0.025 | [6.2e-10,0.26] |
| 1702 | K | 0.024 | [6.2e-10,0.26] |
| 1703 | T | 0.027 | [6.2e-10,0.26] |
| 1704 | R | 0.023 | [6.2e-10,0.26] |
| 1705 | R | 0.025 | [6.2e-10,0.26] |
| 1706 | V | 0.029 | [6.2e-10,0.26] |
| 1707 | L | 0.035 | [6.2e-10,0.26] |
| 1708 | P | 0.036 | [6.2e-10,0.26] |
| 1709 | E | 0.024 | [6.2e-10,0.26] |
| 1710 | I | 0.02 | [6.2e-10,0.26] |
| 1711 | V | 0.025 | [6.2e-10,0.26] |
| 1712 | R | 0.036 | [6.2e-10,0.26] |
| 1713 | E | 0.024 | [6.2e-10,0.26] |
| 1714 | A | 0.026 | [6.2e-10,0.26] |
| 1715 | I | 0.02 | [6.2e-10,0.26] |
| 1716 | K | 0.024 | [6.2e-10,0.26] |
| 1717 | T | 0.22 | [0.013,1] |
| 1718 | R | 0.026 | [6.2e-10,0.26] |
| 1719 | L | 0.032 | [6.2e-10,0.26] |
| 1720 | R | 0.034 | [6.2e-10,0.26] |
| 1721 | T | 0.026 | [6.2e-10,0.26] |
| 1722 | V | 0.21 | [0.013,1] |
| 1723 | 1 | 0.024 | [6.2e-10,0.26] |
| 1724 | L | 0.036 | [6.2e-10,0.26] |
| 1725 | A | 0.027 | [6.2e-10,0.26] |
| 1726 | P | 0.032 | [6.2e-10,0.26] |
| 1727 | T | 0.026 | [6.2e-10,0.26] |
| 1728 | R | 0.25 | [0.013,1] |
| 1729 | V | 0.029 | [6.2e-10,0.26] |
| 1730 | V | 0.25 | [0.013,1] |
| 1731 | A | 0.47 | [0.054,1] |
| 1732 | A | 0.25 | [0.013,1] |
| 1733 | E | 0.34 | [0.054,1] |
| 1734 | M | 0.3 | [0.054,1] |
| 1735 | E | 0.33 | [0.054,1] |
| 1736 | E | 0.36 | [0.054,1] |
| 1737 | A | 0.22 | [0.013,1] |
| 1738 | L | 0.036 | [6.2e-10,0.26] |


| 1739 | R | 0.22 | [0.013,1] |
| :---: | :---: | :---: | :---: |
| 1740 | G | 0.39 | [0.054,1] |
| 1741 | L | 0.53 | [0.054,1] |
| 1742 | P | 0.49 | [0.054,1] |
| 1743 | V | 0.21 | [0.013,1] |
| 1744 | R | 0.036 | [6.2e-10,0.26] |
| 1745 | Y | 0.51 | [0.054,1] |
| 1746 | M | 0.28 | [0.054,1] |
| 1747 | T | 0.026 | [6.2e-10,0.26] |
| 1748 | T | 0.026 | [6.2e-10,0.26] |
| 1749 | A | 0.025 | [6.2e-10,0.26] |
| 1750 | V | 0.026 | [6.2e-10,0.26] |
| 1751 | N | 0.025 | [6.2e-10,0.26] |
| 1752 | V | 0.025 | [6.2e-10,0.26] |
| 1753 | T | 0.026 | [6.2e-10,0.26] |
| 1754 | H | 0.033 | [6.2e-10,0.26] |
| 1755 | S | 0.036 | [6.2e-10,0.26] |
| 1756 | G | 0.024 | [6.2e-10,0.26] |
| 1757 | T | 0.026 | [6.2e-10,0.26] |
| 1758 | E | 0.024 | [6.2e-10,0.26] |
| 1759 | 1 | 0.024 | [6.2e-10,0.26] |
| 1760 | V | 0.029 | [6.2e-10,0.26] |
| 1761 | D | 0.025 | [6.2e-10,0.26] |
| 1762 | L | 0.036 | [6.2e-10,0.26] |
| 1763 | M | 0.018 | [6.2e-10,0.26] |
| 1764 | C | 0.032 | [6.2e-10,0.26] |
| 1765 | H | 0.033 | [6.2e-10,0.26] |
| 1766 | A | 0.026 | [6.2e-10,0.26] |
| 1767 | T | 0.028 | [6.2e-10,0.26] |
| 1768 | F | 0.03 | [6.2e-10,0.26] |
| 1769 | T | 0.03 | [6.2e-10,0.26] |
| 1770 | S | 0.035 | [6.2e-10,0.26] |
| 1771 | R | 0.034 | [6.2e-10,0.26] |
| 1772 | L | 0.037 | [6.2e-10,0.26] |
| 1773 | L | 0.037 | [6.2e-10,0.26] |
| 1774 | Q | 0.035 | [6.2e-10,0.26] |
| 1775 | P | 0.033 | [6.2e-10,0.26] |
| 1776 | 1 | 0.024 | [6.2e-10,0.26] |
| 1777 | R | 0.026 | [6.2e-10,0.26] |
| 1778 | V | 0.025 | [6.2e-10,0.26] |
| 1779 | P | 0.034 | [6.2e-10,0.26] |
| 1780 | N | 0.025 | [6.2e-10,0.26] |
| 1781 | Y | 0.033 | [6.2e-10,0.26] |
| 1782 | N | 0.026 | [6.2e-10,0.26] |
| 1783 | L | 0.033 | [6.2e-10,0.26] |
| 1784 | Y | 0.91 | [0.26,1] |
| 1785 | 1 | 0.025 | [6.2e-10,0.26] |


| 1786 | M | 0.018 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1787 | D | 0.026 | [6.2e-10,0.26] |
| 1788 | E | 0.023 | [6.2e-10,0.26] |
| 1789 | A | 0.026 | [6.2e-10,0.26] |
| 1790 | H | 0.03 | [6.2e-10,0.26] |
| 1791 | F | 0.03 | [6.2e-10,0.26] |
| 1792 | T | 0.026 | [6.2e-10,0.26] |
| 1793 | D | 0.024 | [6.2e-10,0.26] |
| 1794 | P | 0.033 | [6.2e-10,0.26] |
| 1795 | S | 0.035 | [6.2e-10,0.26] |
| 1796 | S | 0.027 | [6.2e-10,0.26] |
| 1797 | 1 | 0.02 | [6.2e-10,0.26] |
| 1798 | A | 0.028 | [6.2e-10,0.26] |
| 1799 | A | 0.025 | [6.2e-10,0.26] |
| 1800 | R | 0.026 | [6.2e-10,0.26] |
| 1801 | G | 0.027 | [6.2e-10,0.26] |
| 1802 | Y | 0.033 | [6.2e-10,0.26] |
| 1803 | 1 | 0.021 | [6.2e-10,0.26] |
| 1804 | S | 0.035 | [6.2e-10,0.26] |
| 1805 | T | 0.026 | [6.2e-10,0.26] |
| 1806 | R | 0.023 | [6.2e-10,0.26] |
| 1807 | V | 0.029 | [6.2e-10,0.26] |
| 1808 | E | 0.023 | [6.2e-10,0.26] |
| 1809 | M | 0.018 | [6.2e-10,0.26] |
| 1810 | G | 0.026 | [6.2e-10,0.26] |
| 1811 | E | 0.022 | [6.2e-10,0.26] |
| 1812 | A | 0.023 | [6.2e-10,0.26] |
| 1813 | A | 0.029 | [6.2e-10,0.26] |
| 1814 | A | 0.026 | [6.2e-10,0.26] |
| 1815 | I | 0.026 | [6.2e-10,0.26] |
| 1816 | F | 0.031 | [6.2e-10,0.26] |
| 1817 | M | 0.018 | [6.2e-10,0.26] |
| 1818 | T | 0.028 | [6.2e-10,0.26] |
| 1819 | A | 0.026 | [6.2e-10,0.26] |
| 1820 | T | 0.025 | [6.2e-10,0.26] |
| 1821 | P | 0.032 | [6.2e-10,0.26] |
| 1822 | P | 0.032 | [6.2e-10,0.26] |
| 1823 | G | 0.027 | [6.2e-10,0.26] |
| 1824 | T | 0.026 | [6.2e-10,0.26] |
| 1825 | R | 0.036 | [6.2e-10,0.26] |
| 1826 | D | 0.025 | [6.2e-10,0.26] |
| 1827 | A | 0.024 | [6.2e-10,0.26] |
| 1828 | F | 0.032 | [6.2e-10,0.26] |
| 1829 | P | 0.033 | [6.2e-10,0.26] |
| 1830 | D | 0.023 | [6.2e-10,0.26] |
| 1831 | S | 0.035 | [6.2e-10,0.26] |
| 1832 | N | 0.024 | [6.2e-10,0.26] |


| 1833 | S | 0.035 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1834 | P | 0.032 | [6.2e-10,0.26] |
| 1835 | 1 | 0.025 | [6.2e-10,0.26] |
| 1836 | M | 0.018 | [6.2e-10,0.26] |
| 1837 | D | 0.023 | [6.2e-10,0.26] |
| 1838 | T | 0.026 | [6.2e-10,0.26] |
| 1839 | E | 0.024 | [6.2e-10,0.26] |
| 1840 | V | 0.023 | [6.2e-10,0.26] |
| 1841 | E | 0.024 | [6.2e-10,0.26] |
| 1842 | V | 0.026 | [6.2e-10,0.26] |
| 1843 | P | 0.032 | [6.2e-10,0.26] |
| 1844 | E | 0.022 | [6.2e-10,0.26] |
| 1845 | R | 0.026 | [6.2e-10,0.26] |
| 1846 | A | 0.026 | [6.2e-10,0.26] |
| 1847 | W | 0.035 | [6.2e-10,0.26] |
| 1848 | S | 0.024 | [6.2e-10,0.26] |
| 1849 | S | 0.29 | [0.013,1] |
| 1850 | G | 0.026 | [6.2e-10,0.26] |
| 1851 | F | 0.033 | [6.2e-10,0.26] |
| 1852 | D | 0.025 | [6.2e-10,0.26] |
| 1853 | W | 0.035 | [6.2e-10,0.26] |
| 1854 | V | 0.023 | [6.2e-10,0.26] |
| 1855 | T | 0.025 | [6.2e-10,0.26] |
| 1856 | D | 0.024 | [6.2e-10,0.26] |
| 1857 | H | 0.27 | [0.013,1] |
| 1858 | S | 0.036 | [6.2e-10,0.26] |
| 1859 | G | 0.025 | [6.2e-10,0.26] |
| 1860 | K | 0.025 | [6.2e-10,0.26] |
| 1861 | T | 0.026 | [6.2e-10,0.26] |
| 1862 | V | 0.25 | [0.013,1] |
| 1863 | W | 0.035 | [6.2e-10,0.26] |
| 1864 | F | 0.032 | [6.2e-10,0.26] |
| 1865 | V | 0.029 | [6.2e-10,0.26] |
| 1866 | P | 0.032 | [6.2e-10,0.26] |
| 1867 | S | 0.026 | [6.2e-10,0.26] |
| 1868 | V | 0.023 | [6.2e-10,0.26] |
| 1869 | R | 0.025 | [6.2e-10,0.26] |
| 1870 | N | 0.82 | [0.26,1] |
| 1871 | G | 0.026 | [6.2e-10,0.26] |
| 1872 | N | 0.85 | [0.26,1] |
| 1873 | E | 0.023 | [6.2e-10,0.26] |
| 1874 | 1 | 0.36 | [0.054,1] |
| 1875 | A | 0.22 | [0.013,1] |
| 1876 | A | 0.027 | [6.2e-10,0.26] |
| 1877 | C | 0.035 | [6.2e-10,0.26] |
| 1878 | L | 0.035 | [6.2e-10,0.26] |
| 1879 | T | 0.026 | [6.2e-10,0.26] |


| 1880 | K | 0.023 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1881 | A | 0.029 | [6.2e-10,0.26] |
| 1882 | G | 0.027 | [6.2e-10,0.26] |
| 1883 | K | 0.023 | [6.2e-10,0.26] |
| 1884 | R | 0.033 | [6.2e-10,0.26] |
| 1885 | V | 0.026 | [6.2e-10,0.26] |
| 1886 | 1 | 0.02 | [6.2e-10,0.26] |
| 1887 | Q | 0.033 | [6.2e-10,0.26] |
| 1888 | L | 0.032 | [6.2e-10,0.26] |
| 1889 | S | 0.024 | [6.2e-10,0.26] |
| 1890 | R | 0.024 | [6.2e-10,0.26] |
| 1891 | K | 0.023 | [6.2e-10,0.26] |
| 1892 | T | 0.03 | [6.2e-10,0.26] |
| 1893 | F | 0.033 | [6.2e-10,0.26] |
| 1894 | E | 0.022 | [6.2e-10,0.26] |
| 1895 | T | 0.026 | [6.2e-10,0.26] |
| 1896 | E | 0.022 | [6.2e-10,0.26] |
| 1897 | F | 0.031 | [6.2e-10,0.26] |
| 1898 | Q | 0.28 | [0.013,1] |
| 1899 | K | 0.024 | [6.2e-10,0.26] |
| 1900 | T | 0.026 | [6.2e-10,0.26] |
| 1901 | K | 0.025 | [6.2e-10,0.26] |
| 1902 | N | 0.23 | [0.013,1] |
| 1903 | Q | 0.035 | [6.2e-10,0.26] |
| 1904 | E | 0.022 | [6.2e-10,0.26] |
| 1905 | W | 0.035 | [6.2e-10,0.26] |
| 1906 | D | 0.023 | [6.2e-10,0.26] |
| 1907 | F | 0.032 | [6.2e-10,0.26] |
| 1908 | V | 0.025 | [6.2e-10,0.26] |
| 1909 | V | 0.2 | [0.013,0.26] |
| 1910 | T | 0.026 | [6.2e-10,0.26] |
| 1911 | T | 0.03 | [6.2e-10,0.26] |
| 1912 | D | 0.023 | [6.2e-10,0.26] |
| 1913 | I | 0.026 | [6.2e-10,0.26] |
| 1914 | S | 0.035 | [6.2e-10,0.26] |
| 1915 | E | 0.022 | [6.2e-10,0.26] |
| 1916 | M | 0.018 | [6.2e-10,0.26] |
| 1917 | G | 0.027 | [6.2e-10,0.26] |
| 1918 | A | 0.025 | [6.2e-10,0.26] |
| 1919 | N | 0.025 | [6.2e-10,0.26] |
| 1920 | F | 0.03 | [6.2e-10,0.26] |
| 1921 | K | 0.024 | [6.2e-10,0.26] |
| 1922 | A | 0.029 | [6.2e-10,0.26] |
| 1923 | D | 0.023 | [6.2e-10,0.26] |
| 1924 | R | 0.033 | [6.2e-10,0.26] |
| 1925 | V | 0.025 | [6.2e-10,0.26] |
| 1926 | 1 | 0.02 | [6.2e-10,0.26] |


| 1927 | D | 0.025 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 1928 | S | 0.034 | [6.2e-10,0.26] |
| 1929 | R | 0.023 | [6.2e-10,0.26] |
| 1930 | R | 0.026 | [6.2e-10,0.26] |
| 1931 | C | 0.032 | [6.2e-10,0.26] |
| 1932 | L | 0.037 | [6.2e-10,0.26] |
| 1933 | K | 0.023 | [6.2e-10,0.26] |
| 1934 | P | 0.032 | [6.2e-10,0.26] |
| 1935 | V | 0.026 | [6.2e-10,0.26] |
| 1936 | 1 | 0.02 | [6.2e-10,0.26] |
| 1937 | L | 0.035 | [6.2e-10,0.26] |
| 1938 | D | 0.026 | [6.2e-10,0.26] |
| 1939 | G | 0.028 | [6.2e-10,0.26] |
| 1940 | E | 0.022 | [6.2e-10,0.26] |
| 1941 | R | 0.026 | [6.2e-10,0.26] |
| 1942 | V | 0.025 | [6.2e-10,0.26] |
| 1943 | 1 | 0.025 | [6.2e-10,0.26] |
| 1944 | L | 0.035 | [6.2e-10,0.26] |
| 1945 | A | 0.029 | [6.2e-10,0.26] |
| 1946 | G | 0.025 | [6.2e-10,0.26] |
| 1947 | P | 0.033 | [6.2e-10,0.26] |
| 1948 | M | 0.018 | [6.2e-10,0.26] |
| 1949 | P | 0.036 | [6.2e-10,0.26] |
| 1950 | V | 0.025 | [6.2e-10,0.26] |
| 1951 | T | 0.025 | [6.2e-10,0.26] |
| 1952 | H | 0.033 | [6.2e-10,0.26] |
| 1953 | A | 0.027 | [6.2e-10,0.26] |
| 1954 | S | 0.026 | [6.2e-10,0.26] |
| 1955 | A | 0.029 | [6.2e-10,0.26] |
| 1956 | A | 0.028 | [6.2e-10,0.26] |
| 1957 | Q | 0.033 | [6.2e-10,0.26] |
| 1958 | R | 0.023 | [6.2e-10,0.26] |
| 1959 | R | 0.025 | [6.2e-10,0.26] |
| 1960 | G | 0.025 | [6.2e-10,0.26] |
| 1961 | R | 0.035 | [6.2e-10,0.26] |
| 1962 | 1 | 0.19 | [0.013,0.26] |
| 1963 | G | 0.026 | [6.2e-10,0.26] |
| 1964 | R | 0.023 | [6.2e-10,0.26] |
| 1965 | N | 0.025 | [6.2e-10,0.26] |
| 1966 | P | 0.034 | [6.2e-10,0.26] |
| 1967 | N | 0.024 | [6.2e-10,0.26] |
| 1968 | K | 0.025 | [6.2e-10,0.26] |
| 1969 | P | 0.036 | [6.2e-10,0.26] |
| 1970 | G | 0.027 | [6.2e-10,0.26] |
| 1971 | D | 0.026 | [6.2e-10,0.26] |
| 1972 | E | 0.022 | [6.2e-10,0.26] |
| 1973 | Y | 0.034 | [6.2e-10,0.26] |


| 1974 | M | 0.19 | [0.013,0.26] |
| :---: | :---: | :---: | :---: |
| 1975 | Y | 0.036 | [6.2e-10,0.26] |
| 1976 | G | 0.027 | [6.2e-10,0.26] |
| 1977 | G | 0.03 | [6.2e-10,0.26] |
| 1978 | G | 0.024 | [6.2e-10,0.26] |
| 1979 | C | 0.034 | [6.2e-10,0.26] |
| 1980 | A | 0.025 | [6.2e-10,0.26] |
| 1981 | E | 0.022 | [6.2e-10,0.26] |
| 1982 | T | 0.029 | [6.2e-10,0.26] |
| 1983 | D | 0.026 | [6.2e-10,0.26] |
| 1984 | E | 0.024 | [6.2e-10,0.26] |
| 1985 | D | 0.35 | [0.054,1] |
| 1986 | H | 0.033 | [6.2e-10,0.26] |
| 1987 | A | 0.025 | [6.2e-10,0.26] |
| 1988 | H | 0.03 | [6.2e-10,0.26] |
| 1989 | W | 0.035 | [6.2e-10,0.26] |
| 1990 | L | 0.035 | [6.2e-10,0.26] |
| 1991 | E | 0.024 | [6.2e-10,0.26] |
| 1992 | A | 0.025 | [6.2e-10,0.26] |
| 1993 | R | 0.026 | [6.2e-10,0.26] |
| 1994 | M | 0.018 | [6.2e-10,0.26] |
| 1995 | L | 0.035 | [6.2e-10,0.26] |
| 1996 | L | 0.035 | [6.2e-10,0.26] |
| 1997 | D | 0.023 | [6.2e-10,0.26] |
| 1998 | N | 0.024 | [6.2e-10,0.26] |
| 1999 | I | 0.026 | [6.2e-10,0.26] |
| 2000 | Y | 0.032 | [6.2e-10,0.26] |
| 2001 | L | 0.032 | [6.2e-10,0.26] |
| 2002 | Q | 0.034 | [6.2e-10,0.26] |
| 2003 | D | 0.026 | [6.2e-10,0.26] |
| 2004 | G | 0.026 | [6.2e-10,0.26] |
| 2005 | L | 0.032 | [6.2e-10,0.26] |
| 2006 | 1 | 0.02 | [6.2e-10,0.26] |
| 2007 | A | 0.026 | [6.2e-10,0.26] |
| 2008 | S | 0.032 | [6.2e-10,0.26] |
| 2009 | L | 0.032 | [6.2e-10,0.26] |
| 2010 | Y | 0.036 | [6.2e-10,0.26] |
| 2011 | R | 0.035 | [6.2e-10,0.26] |
| 2012 | P | 0.036 | [6.2e-10,0.26] |
| 2013 | E | 0.022 | [6.2e-10,0.26] |
| 2014 | A | 0.026 | [6.2e-10,0.26] |
| 2015 | D | 0.024 | [6.2e-10,0.26] |
| 2016 | K | 0.023 | [6.2e-10,0.26] |
| 2017 | V | 0.025 | [6.2e-10,0.26] |
| 2018 | A | 0.026 | [6.2e-10,0.26] |
| 2019 | A | 0.026 | [6.2e-10,0.26] |
| 2020 | , | 0.027 | [6.2e-10,0.26] |


| 2021 | E | 0.022 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2022 | G | 0.027 | [6.2e-10,0.26] |
| 2023 | E | 0.022 | [6.2e-10,0.26] |
| 2024 | F | 0.03 | [6.2e-10,0.26] |
| 2025 | K | 0.023 | [6.2e-10,0.26] |
| 2026 | L | 0.035 | [6.2e-10,0.26] |
| 2027 | R | 0.023 | [6.2e-10,0.26] |
| 2028 | T | 0.025 | [6.2e-10,0.26] |
| 2029 | E | 0.022 | [6.2e-10,0.26] |
| 2030 | Q | 0.035 | [6.2e-10,0.26] |
| 2031 | R | 0.023 | [6.2e-10,0.26] |
| 2032 | K | 0.023 | [6.2e-10,0.26] |
| 2033 | T | 0.026 | [6.2e-10,0.26] |
| 2034 | F | 0.032 | [6.2e-10,0.26] |
| 2035 | V | 0.023 | [6.2e-10,0.26] |
| 2036 | E | 0.024 | [6.2e-10,0.26] |
| 2037 | L | 0.032 | [6.2e-10,0.26] |
| 2038 | M | 0.018 | [6.2e-10,0.26] |
| 2039 | K | 0.023 | [6.2e-10,0.26] |
| 2040 | R | 0.026 | [6.2e-10,0.26] |
| 2041 | G | 0.027 | [6.2e-10,0.26] |
| 2042 | D | 0.024 | [6.2e-10,0.26] |
| 2043 | L | 0.035 | [6.2e-10,0.26] |
| 2044 | P | 0.034 | [6.2e-10,0.26] |
| 2045 | V | 0.029 | [6.2e-10,0.26] |
| 2046 | W | 0.035 | [6.2e-10,0.26] |
| 2047 | L | 0.036 | [6.2e-10,0.26] |
| 2048 | A | 0.026 | [6.2e-10,0.26] |
| 2049 | Y | 0.036 | [6.2e-10,0.26] |
| 2050 | Q | 0.034 | [6.2e-10,0.26] |
| 2051 | V | 0.028 | [6.2e-10,0.26] |
| 2052 | A | 0.025 | [6.2e-10,0.26] |
| 2053 | S | 0.036 | [6.2e-10,0.26] |
| 2054 | A | 0.026 | [6.2e-10,0.26] |
| 2055 | G | 0.027 | [6.2e-10,0.26] |
| 2056 | 1 | 0.02 | [6.2e-10,0.26] |
| 2057 | T | 0.028 | [6.2e-10,0.26] |
| 2058 | Y | 0.032 | [6.2e-10,0.26] |
| 2059 | T | 0.026 | [6.2e-10,0.26] |
| 2060 | D | 0.024 | [6.2e-10,0.26] |
| 2061 | R | 0.026 | [6.2e-10,0.26] |
| 2062 | R | 0.22 | [0.013,1] |
| 2063 | W | 0.035 | [6.2e-10,0.26] |
| 2064 | C | 0.032 | [6.2e-10,0.26] |
| 2065 | F | 0.033 | [6.2e-10,0.26] |
| 2066 | D | 0.026 | [6.2e-10,0.26] |
| 2067 | G | 0.026 | [6.2e-10,0.26] |


| 2068 | T | 0.38 | [0.054,1] |
| :---: | :---: | :---: | :---: |
| 2069 | T | 0.026 | [6.2e-10,0.26] |
| 2070 | N | 0.024 | [6.2e-10,0.26] |
| 2071 | N | 0.024 | [6.2e-10,0.26] |
| 2072 | T | 0.026 | [6.2e-10,0.26] |
| 2073 | I | 0.02 | [6.2e-10,0.26] |
| 2074 | M | 0.17 | [0.013,0.26] |
| 2075 | E | 0.024 | [6.2e-10,0.26] |
| 2076 | D | 0.023 | [6.2e-10,0.26] |
| 2077 | S | 0.027 | [6.2e-10,0.26] |
| 2078 | V | 0.025 | [6.2e-10,0.26] |
| 2079 | P | 0.032 | [6.2e-10,0.26] |
| 2080 | A | 0.025 | [6.2e-10,0.26] |
| 2081 | E | 0.022 | [6.2e-10,0.26] |
| 2082 | V | 0.024 | [6.2e-10,0.26] |
| 2083 | W | 0.035 | [6.2e-10,0.26] |
| 2084 | T | 0.026 | [6.2e-10,0.26] |
| 2085 | R | 0.21 | [0.013,1] |
| 2086 | Y | 0.29 | [0.013,1] |
| 2087 | G | 0.027 | [6.2e-10,0.26] |
| 2088 | E | 0.022 | [6.2e-10,0.26] |
| 2089 | K | 0.023 | [6.2e-10,0.26] |
| 2090 | R | 0.026 | [6.2e-10,0.26] |
| 2091 | V | 0.023 | [6.2e-10,0.26] |
| 2092 | L | 0.032 | [6.2e-10,0.26] |
| 2093 | K | 0.025 | [6.2e-10,0.26] |
| 2094 | P | 0.031 | [6.2e-10,0.26] |
| 2095 | R | 0.024 | [6.2e-10,0.26] |
| 2096 | W | 0.035 | [6.2e-10,0.26] |
| 2097 | M | 0.018 | [6.2e-10,0.26] |
| 2098 | D | 0.025 | [6.2e-10,0.26] |
| 2099 | A | 0.027 | [6.2e-10,0.26] |
| 2100 | R | 0.024 | [6.2e-10,0.26] |
| 2101 | V | 0.027 | [6.2e-10,0.26] |
| 2102 | C | 0.035 | [6.2e-10,0.26] |
| 2103 | S | 0.035 | [6.2e-10,0.26] |
| 2104 | D | 0.026 | [6.2e-10,0.26] |
| 2105 | H | 0.033 | [6.2e-10,0.26] |
| 2106 | A | 0.024 | [6.2e-10,0.26] |
| 2107 | A | 0.026 | [6.2e-10,0.26] |
| 2108 | L | 0.035 | [6.2e-10,0.26] |
| 2109 | K | 0.023 | [6.2e-10,0.26] |
| 2110 | S | 0.033 | [6.2e-10,0.26] |
| 2111 | F | 0.03 | [6.2e-10,0.26] |
| 2112 | K | 0.024 | [6.2e-10,0.26] |
| 2113 | E | 0.024 | [6.2e-10,0.26] |
| 2114 | F | 0.032 | [6.2e-10,0.26] |


| 2115 | A | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2116 | A | 0.029 | [6.2e-10,0.26] |
| 2117 | G | 0.024 | [6.2e-10,0.26] |
| 2118 | K | 0.024 | [6.2e-10,0.26] |
| 2119 | R | 0.026 | [6.2e-10,0.26] |
| 2120 | G | 0.027 | [6.2e-10,0.26] |
| 2121 | A | 0.21 | [0.013,1] |
| 2122 | A | 0.028 | [6.2e-10,0.26] |
| 2123 | F | 0.28 | [0.013,1] |
| 2124 | G | 0.027 | [6.2e-10,0.26] |
| 2125 | V | 0.025 | [6.2e-10,0.26] |
| 2126 | M | 0.17 | [0.013,0.26] |
| 2127 | E | 0.21 | [0.013,1] |
| 2128 | A | 0.026 | [6.2e-10,0.26] |
| 2129 | L | 0.035 | [6.2e-10,0.26] |
| 2130 | G | 0.027 | [6.2e-10,0.26] |
| 2131 | T | 0.026 | [6.2e-10,0.26] |
| 2132 | L | 0.035 | [6.2e-10,0.26] |
| 2133 | P | 0.032 | [6.2e-10,0.26] |
| 2134 | G | 0.027 | [6.2e-10,0.26] |
| 2135 | H | 0.03 | [6.2e-10,0.26] |
| 2136 | M | 0.018 | [6.2e-10,0.26] |
| 2137 | T | 0.026 | [6.2e-10,0.26] |
| 2138 | E | 0.022 | [6.2e-10,0.26] |
| 2139 | R | 0.024 | [6.2e-10,0.26] |
| 2140 | F | 0.032 | [6.2e-10,0.26] |
| 2141 | Q | 0.033 | [6.2e-10,0.26] |
| 2142 | E | 0.024 | [6.2e-10,0.26] |
| 2143 | A | 0.026 | [6.2e-10,0.26] |
| 2144 | I | 0.027 | [6.2e-10,0.26] |
| 2145 | D | 0.023 | [6.2e-10,0.26] |
| 2146 | N | 0.025 | [6.2e-10,0.26] |
| 2147 | L | 0.032 | [6.2e-10,0.26] |
| 2148 | A | 0.029 | [6.2e-10,0.26] |
| 2149 | V | 0.023 | [6.2e-10,0.26] |
| 2150 | L | 0.032 | [6.2e-10,0.26] |
| 2151 | M | 0.018 | [6.2e-10,0.26] |
| 2152 | R | 0.037 | [6.2e-10,0.26] |
| 2153 | A | 0.025 | [6.2e-10,0.26] |
| 2154 | E | 0.022 | [6.2e-10,0.26] |
| 2155 | T | 0.03 | [6.2e-10,0.26] |
| 2156 | G | 0.027 | [6.2e-10,0.26] |
| 2157 | S | 0.025 | [6.2e-10,0.26] |
| 2158 | R | 0.023 | [6.2e-10,0.26] |
| 2159 | P | 0.035 | [6.2e-10,0.26] |
| 2160 | Y | 0.033 | [6.2e-10,0.26] |
| 2161 | K | 0.21 | [0.013,1] |


| 2162 | A | 0.025 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2163 | A | 0.023 | [6.2e-10,0.26] |
| 2164 | A | 0.025 | [6.2e-10,0.26] |
| 2165 | A | 0.026 | [6.2e-10,0.26] |
| 2166 | Q | 0.29 | [0.013,1] |
| 2167 | L | 0.035 | [6.2e-10,0.26] |
| 2168 | P | 0.031 | [6.2e-10,0.26] |
| 2169 | E | 0.022 | [6.2e-10,0.26] |
| 2170 | T | 0.026 | [6.2e-10,0.26] |
| 2171 | L | 0.037 | [6.2e-10,0.26] |
| 2172 | E | 0.022 | [6.2e-10,0.26] |
| 2173 | T | 0.026 | [6.2e-10,0.26] |
| 2174 | I | 0.025 | [6.2e-10,0.26] |
| 2175 | M | 0.018 | [6.2e-10,0.26] |
| 2176 | L | 0.034 | [6.2e-10,0.26] |
| 2177 | L | 0.035 | [6.2e-10,0.26] |
| 2178 | G | 0.028 | [6.2e-10,0.26] |
| 2179 | L | 0.035 | [6.2e-10,0.26] |
| 2180 | L | 0.035 | [6.2e-10,0.26] |
| 2181 | G | 0.027 | [6.2e-10,0.26] |
| 2182 | T | 0.026 | [6.2e-10,0.26] |
| 2183 | V | 0.028 | [6.2e-10,0.26] |
| 2184 | S | 0.032 | [6.2e-10,0.26] |
| 2185 | L | 0.035 | [6.2e-10,0.26] |
| 2186 | G | 0.025 | [6.2e-10,0.26] |
| 2187 | 1 | 0.024 | [6.2e-10,0.26] |
| 2188 | F | 0.03 | [6.2e-10,0.26] |
| 2189 | F | 0.032 | [6.2e-10,0.26] |
| 2190 | V | 0.025 | [6.2e-10,0.26] |
| 2191 | L | 0.035 | [6.2e-10,0.26] |
| 2192 | M | 0.018 | [6.2e-10,0.26] |
| 2193 | R | 0.032 | [6.2e-10,0.26] |
| 2194 | N | 0.024 | [6.2e-10,0.26] |
| 2195 | K | 0.023 | [6.2e-10,0.26] |
| 2196 | G | 0.026 | [6.2e-10,0.26] |
| 2197 | 1 | 0.21 | [0.013,1] |
| 2198 | G | 0.024 | [6.2e-10,0.26] |
| 2199 | K | 0.023 | [6.2e-10,0.26] |
| 2200 | M | 0.018 | [6.2e-10,0.26] |
| 2201 | G | 0.026 | [6.2e-10,0.26] |
| 2202 | F | 0.032 | [6.2e-10,0.26] |
| 2203 | G | 0.027 | [6.2e-10,0.26] |
| 2204 | M | 0.018 | [6.2e-10,0.26] |
| 2205 | V | 0.025 | [6.2e-10,0.26] |
| 2206 | T | 0.027 | [6.2e-10,0.26] |
| 2207 | L | 0.035 | [6.2e-10,0.26] |
| 2208 | G | 0.024 | [6.2e-10,0.26] |


| 2209 | A | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2210 | S | 0.026 | [6.2e-10,0.26] |
| 2211 | A | 0.025 | [6.2e-10,0.26] |
| 2212 | W | 0.035 | [6.2e-10,0.26] |
| 2213 | L | 0.033 | [6.2e-10,0.26] |
| 2214 | M | 0.018 | [6.2e-10,0.26] |
| 2215 | W | 0.035 | [6.2e-10,0.26] |
| 2216 | L | 0.034 | [6.2e-10,0.26] |
| 2217 | S | 0.032 | [6.2e-10,0.26] |
| 2218 | E | 0.024 | [6.2e-10,0.26] |
| 2219 | 1 | 0.027 | [6.2e-10,0.26] |
| 2220 | E | 0.023 | [6.2e-10,0.26] |
| 2221 | P | 0.032 | [6.2e-10,0.26] |
| 2222 | A | 0.026 | [6.2e-10,0.26] |
| 2223 | R | 0.026 | [6.2e-10,0.26] |
| 2224 | 1 | 0.027 | [6.2e-10,0.26] |
| 2225 | A | 0.025 | [6.2e-10,0.26] |
| 2226 | C | 0.035 | [6.2e-10,0.26] |
| 2227 | V | 0.025 | [6.2e-10,0.26] |
| 2228 | L | 0.032 | [6.2e-10,0.26] |
| 2229 | I | 0.027 | [6.2e-10,0.26] |
| 2230 | V | 0.028 | [6.2e-10,0.26] |
| 2231 | V | 0.023 | [6.2e-10,0.26] |
| 2232 | F | 0.032 | [6.2e-10,0.26] |
| 2233 | L | 0.036 | [6.2e-10,0.26] |
| 2234 | L | 0.036 | [6.2e-10,0.26] |
| 2235 | L | 0.035 | [6.2e-10,0.26] |
| 2236 | V | 0.023 | [6.2e-10,0.26] |
| 2237 | V | 0.024 | [6.2e-10,0.26] |
| 2238 | L | 0.032 | [6.2e-10,0.26] |
| 2239 | 1 | 0.02 | [6.2e-10,0.26] |
| 2240 | P | 0.034 | [6.2e-10,0.26] |
| 2241 | E | 0.022 | [6.2e-10,0.26] |
| 2242 | P | 0.032 | [6.2e-10,0.26] |
| 2243 | E | 0.023 | [6.2e-10,0.26] |
| 2244 | K | 0.023 | [6.2e-10,0.26] |
| 2245 | Q | 0.035 | [6.2e-10,0.26] |
| 2246 | R | 0.026 | [6.2e-10,0.26] |
| 2247 | S | 0.036 | [6.2e-10,0.26] |
| 2248 | P | 0.033 | [6.2e-10,0.26] |
| 2249 | Q | 0.033 | [6.2e-10,0.26] |
| 2250 | D | 0.024 | [6.2e-10,0.26] |
| 2251 | N | 0.024 | [6.2e-10,0.26] |
| 2252 | Q | 0.034 | [6.2e-10,0.26] |
| 2253 | M | 0.018 | [6.2e-10,0.26] |
| 2254 | A | 0.025 | [6.2e-10,0.26] |
| 2255 | 1 | 0.025 | [6.2e-10,0.26] |


| 2256 | 1 | 0.024 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2257 | 1 | 0.024 | [6.2e-10,0.26] |
| 2258 | M | 0.018 | [6.2e-10,0.26] |
| 2259 | V | 0.21 | [0.013,1] |
| 2260 | A | 0.025 | [6.2e-10,0.26] |
| 2261 | V | 0.024 | [6.2e-10,0.26] |
| 2262 | G | 0.027 | [6.2e-10,0.26] |
| 2263 | L | 0.035 | [6.2e-10,0.26] |
| 2264 | L | 0.035 | [6.2e-10,0.26] |
| 2265 | G | 0.028 | [6.2e-10,0.26] |
| 2266 | L | 0.035 | [6.2e-10,0.26] |
| 2267 | 1 | 0.021 | [6.2e-10,0.26] |
| 2268 | T | 0.028 | [6.2e-10,0.26] |
| 2269 | A | 0.025 | [6.2e-10,0.26] |
| 2270 | N | 0.026 | [6.2e-10,0.26] |
| 2271 | E | 0.024 | [6.2e-10,0.26] |
| 2272 | L | 0.033 | [6.2e-10,0.26] |
| 2273 | G | 0.027 | [6.2e-10,0.26] |
| 2274 | W | 0.035 | [6.2e-10,0.26] |
| 2275 | L | 0.035 | [6.2e-10,0.26] |
| 2276 | E | 0.023 | [6.2e-10,0.26] |
| 2277 | R | 0.025 | [6.2e-10,0.26] |
| 2278 | T | 0.026 | [6.2e-10,0.26] |
| 2279 | K | 0.024 | [6.2e-10,0.26] |
| 2280 | S | 0.24 | [0.013,1] |
| 2281 | D | 0.024 | [6.2e-10,0.26] |
| 2282 | L | 0.22 | [0.013,1] |
| 2283 | G | 0.44 | [0.054,1] |
| 2284 | H | 0.28 | [0.013,1] |
| 2285 | L | 0.037 | [6.2e-10,0.26] |
| 2286 | M | 0.018 | [6.2e-10,0.26] |
| 2287 | G | 0.027 | [6.2e-10,0.26] |
| 2288 | R | 0.023 | [6.2e-10,0.26] |
| 2289 | R | 0.22 | [0.013,1] |
| 2290 | E | 0.023 | [6.2e-10,0.26] |
| 2291 | E | 0.023 | [6.2e-10,0.26] |
| 2292 | G | 0.025 | [6.2e-10,0.26] |
| 2293 | A | 0.41 | [0.054,1] |
| 2294 | T | 0.027 | [6.2e-10,0.26] |
| 2295 | M | 0.97 | [0.26,1] |
| 2296 | G | 0.027 | [6.2e-10,0.26] |
| 2297 | F | 0.03 | [6.2e-10,0.26] |
| 2298 | S | 0.035 | [6.2e-10,0.26] |
| 2299 | M | 0.018 | [6.2e-10,0.26] |
| 2300 | D | 0.024 | [6.2e-10,0.26] |
| 2301 | 1 | 0.027 | [6.2e-10,0.26] |
| 2302 | D | 0.025 | [6.2e-10,0.26] |


| 2303 | L | 0.035 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2304 | R | 0.033 | [6.2e-10,0.26] |
| 2305 | P | 0.032 | [6.2e-10,0.26] |
| 2306 | A | 0.026 | [6.2e-10,0.26] |
| 2307 | S | 0.034 | [6.2e-10,0.26] |
| 2308 | A | 0.027 | [6.2e-10,0.26] |
| 2309 | W | 0.035 | [6.2e-10,0.26] |
| 2310 | A | 0.029 | [6.2e-10,0.26] |
| 2311 | 1 | 0.025 | [6.2e-10,0.26] |
| 2312 | Y | 0.036 | [6.2e-10,0.26] |
| 2313 | A | 0.026 | [6.2e-10,0.26] |
| 2314 | A | 0.026 | [6.2e-10,0.26] |
| 2315 | L | 0.035 | [6.2e-10,0.26] |
| 2316 | T | 0.026 | [6.2e-10,0.26] |
| 2317 | T | 0.03 | [6.2e-10,0.26] |
| 2318 | L | 0.27 | [0.013,1] |
| 2319 | 1 | 0.024 | [6.2e-10,0.26] |
| 2320 | T | 0.026 | [6.2e-10,0.26] |
| 2321 | P | 0.032 | [6.2e-10,0.26] |
| 2322 | A | 0.026 | [6.2e-10,0.26] |
| 2323 | v | 0.025 | [6.2e-10,0.26] |
| 2324 | Q | 0.035 | [6.2e-10,0.26] |
| 2325 | H | 0.033 | [6.2e-10,0.26] |
| 2326 | A | 0.024 | [6.2e-10,0.26] |
| 2327 | V | 0.025 | [6.2e-10,0.26] |
| 2328 | T | 0.026 | [6.2e-10,0.26] |
| 2329 | T | 0.029 | [6.2e-10,0.26] |
| 2330 | S | 0.035 | [6.2e-10,0.26] |
| 2331 | Y | 0.033 | [6.2e-10,0.26] |
| 2332 | N | 0.024 | [6.2e-10,0.26] |
| 2333 | N | 0.024 | [6.2e-10,0.26] |
| 2334 | Y | 0.032 | [6.2e-10,0.26] |
| 2335 | S | 0.033 | [6.2e-10,0.26] |
| 2336 | L | 0.037 | [6.2e-10,0.26] |
| 2337 | M | 0.018 | [6.2e-10,0.26] |
| 2338 | A | 0.023 | [6.2e-10,0.26] |
| 2339 | M | 0.018 | [6.2e-10,0.26] |
| 2340 | A | 0.026 | [6.2e-10,0.26] |
| 2341 | T | 0.025 | [6.2e-10,0.26] |
| 2342 | Q | 0.035 | [6.2e-10,0.26] |
| 2343 | A | 0.029 | [6.2e-10,0.26] |
| 2344 | G | 0.026 | [6.2e-10,0.26] |
| 2345 | V | 0.023 | [6.2e-10,0.26] |
| 2346 | L | 0.035 | [6.2e-10,0.26] |
| 2347 | F | 0.033 | [6.2e-10,0.26] |
| 2348 | G | 0.027 | [6.2e-10,0.26] |
| 2349 | M | 0.018 | [6.2e-10,0.26] |


| 2350 | G | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2351 | K | 0.025 | [6.2e-10,0.26] |
| 2352 | G | 0.024 | [6.2e-10,0.26] |
| 2353 | M | 0.018 | [6.2e-10,0.26] |
| 2354 | P | 0.032 | [6.2e-10,0.26] |
| 2355 | F | 0.031 | [6.2e-10,0.26] |
| 2356 | Y | 1 | [1,1]* |
| 2357 | A | 0.94 | [0.26,1] |
| 2358 | W | 0.52 | [0.054,1] |
| 2359 | D | 0.023 | [6.2e-10,0.26] |
| 2360 | F | 0.49 | [0.054,1] |
| 2361 | G | 0.027 | [6.2e-10,0.26] |
| 2362 | V | 0.025 | [6.2e-10,0.26] |
| 2363 | P | 0.031 | [6.2e-10,0.26] |
| 2364 | L | 0.035 | [6.2e-10,0.26] |
| 2365 | L | 0.037 | [6.2e-10,0.26] |
| 2366 | M | 0.018 | [6.2e-10,0.26] |
| 2367 | M | 0.4 | [0.26,1] |
| 2368 | G | 0.03 | [6.2e-10,0.26] |
| 2369 | C | 0.032 | [6.2e-10,0.26] |
| 2370 | Y | 0.033 | [6.2e-10,0.26] |
| 2371 | S | 0.035 | [6.2e-10,0.26] |
| 2372 | Q | 0.035 | [6.2e-10,0.26] |
| 2373 | L | 0.037 | [6.2e-10,0.26] |
| 2374 | T | 0.026 | [6.2e-10,0.26] |
| 2375 | P | 0.033 | [6.2e-10,0.26] |
| 2376 | L | 0.035 | [6.2e-10,0.26] |
| 2377 | T | 0.026 | [6.2e-10,0.26] |
| 2378 | L | 0.036 | [6.2e-10,0.26] |
| 2379 | 1 | 0.02 | [6.2e-10,0.26] |
| 2380 | V | 0.024 | [6.2e-10,0.26] |
| 2381 | A | 0.027 | [6.2e-10,0.26] |
| 2382 | I | 0.024 | [6.2e-10,0.26] |
| 2383 | 1 | 0.027 | [6.2e-10,0.26] |
| 2384 | L | 0.035 | [6.2e-10,0.26] |
| 2385 | L | 0.034 | [6.2e-10,0.26] |
| 2386 | V | 0.023 | [6.2e-10,0.26] |
| 2387 | A | 0.024 | [6.2e-10,0.26] |
| 2388 | H | 0.03 | [6.2e-10,0.26] |
| 2389 | Y | 0.033 | [6.2e-10,0.26] |
| 2390 | M | 0.018 | [6.2e-10,0.26] |
| 2391 | Y | 0.033 | [6.2e-10,0.26] |
| 2392 | L | 0.035 | [6.2e-10,0.26] |
| 2393 | 1 | 0.024 | [6.2e-10,0.26] |
| 2394 | P | 0.032 | [6.2e-10,0.26] |
| 2395 | G | 0.027 | [6.2e-10,0.26] |
| 2396 | L | 0.036 | [6.2e-10,0.26] |


| 2397 | Q | 0.033 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2398 | A | 0.025 | [6.2e-10,0.26] |
| 2399 | A | 0.025 | [6.2e-10,0.26] |
| 2400 | A | 0.026 | [6.2e-10,0.26] |
| 2401 | A | 0.024 | [6.2e-10,0.26] |
| 2402 | R | 0.036 | [6.2e-10,0.26] |
| 2403 | A | 0.029 | [6.2e-10,0.26] |
| 2404 | A | 0.026 | [6.2e-10,0.26] |
| 2405 | Q | 0.033 | [6.2e-10,0.26] |
| 2406 | K | 0.023 | [6.2e-10,0.26] |
| 2407 | R | 0.025 | [6.2e-10,0.26] |
| 2408 | T | 0.025 | [6.2e-10,0.26] |
| 2409 | A | 0.025 | [6.2e-10,0.26] |
| 2410 | A | 0.029 | [6.2e-10,0.26] |
| 2411 | G | 0.026 | [6.2e-10,0.26] |
| 2412 | I | 0.024 | [6.2e-10,0.26] |
| 2413 | M | 0.018 | [6.2e-10,0.26] |
| 2414 | K | 0.023 | [6.2e-10,0.26] |
| 2415 | N | 0.025 | [6.2e-10,0.26] |
| 2416 | P | 0.034 | [6.2e-10,0.26] |
| 2417 | V | 0.029 | [6.2e-10,0.26] |
| 2418 | V | 0.024 | [6.2e-10,0.26] |
| 2419 | D | 0.026 | [6.2e-10,0.26] |
| 2420 | G | 0.027 | [6.2e-10,0.26] |
| 2421 | 1 | 0.02 | [6.2e-10,0.26] |
| 2422 | V | 0.023 | [6.2e-10,0.26] |
| 2423 | V | 0.024 | [6.2e-10,0.26] |
| 2424 | T | 0.03 | [6.2e-10,0.26] |
| 2425 | D | 0.023 | [6.2e-10,0.26] |
| 2426 | I | 0.027 | [6.2e-10,0.26] |
| 2427 | D | 0.023 | [6.2e-10,0.26] |
| 2428 | T | 0.026 | [6.2e-10,0.26] |
| 2429 | M | 0.018 | [6.2e-10,0.26] |
| 2430 | T | 0.026 | [6.2e-10,0.26] |
| 2431 | I | 0.027 | [6.2e-10,0.26] |
| 2432 | D | 0.023 | [6.2e-10,0.26] |
| 2433 | P | 0.27 | [0.013,1] |
| 2434 | Q | 0.29 | [0.013,1] |
| 2435 | V | 0.023 | [6.2e-10,0.26] |
| 2436 | E | 0.022 | [6.2e-10,0.26] |
| 2437 | K | 0.023 | [6.2e-10,0.26] |
| 2438 | K | 0.023 | [6.2e-10,0.26] |
| 2439 | M | 0.018 | [6.2e-10,0.26] |
| 2440 | G | 0.026 | [6.2e-10,0.26] |
| 2441 | Q | 0.035 | [6.2e-10,0.26] |
| 2442 | V | 0.023 | [6.2e-10,0.26] |
| 2443 | L | 0.037 | [6.2e-10,0.26] |


| 2444 | L | 0.032 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2445 | 1 | 0.19 | [0.013,0.26] |
| 2446 | A | 0.025 | [6.2e-10,0.26] |
| 2447 | V | 0.025 | [6.2e-10,0.26] |
| 2448 | A | 0.026 | [6.2e-10,0.26] |
| 2449 | I | 0.61 | [0.26,1] |
| 2450 | S | 0.033 | [6.2e-10,0.26] |
| 2451 | S | 0.027 | [6.2e-10,0.26] |
| 2452 | A | 0.028 | [6.2e-10,0.26] |
| 2453 | V | 0.21 | [0.013,1] |
| 2454 | L | 0.035 | [6.2e-10,0.26] |
| 2455 | L | 0.34 | [0.013,1] |
| 2456 | R | 0.033 | [6.2e-10,0.26] |
| 2457 | T | 0.027 | [6.2e-10,0.26] |
| 2458 | A | 0.027 | [6.2e-10,0.26] |
| 2459 | W | 0.29 | [0.013,1] |
| 2460 | G | 0.026 | [6.2e-10,0.26] |
| 2461 | W | 0.035 | [6.2e-10,0.26] |
| 2462 | G | 0.024 | [6.2e-10,0.26] |
| 2463 | E | 0.022 | [6.2e-10,0.26] |
| 2464 | A | 0.029 | [6.2e-10,0.26] |
| 2465 | G | 0.025 | [6.2e-10,0.26] |
| 2466 | A | 0.028 | [6.2e-10,0.26] |
| 2467 | L | 0.035 | [6.2e-10,0.26] |
| 2468 | 1 | 0.024 | [6.2e-10,0.26] |
| 2469 | T | 0.026 | [6.2e-10,0.26] |
| 2470 | A | 0.026 | [6.2e-10,0.26] |
| 2471 | A | 0.025 | [6.2e-10,0.26] |
| 2472 | T | 0.027 | [6.2e-10,0.26] |
| 2473 | S | 0.033 | [6.2e-10,0.26] |
| 2474 | T | 0.027 | [6.2e-10,0.26] |
| 2475 | L | 0.035 | [6.2e-10,0.26] |
| 2476 | W | 0.035 | [6.2e-10,0.26] |
| 2477 | E | 0.024 | [6.2e-10,0.26] |
| 2478 | G | 0.026 | [6.2e-10,0.26] |
| 2479 | S | 0.036 | [6.2e-10,0.26] |
| 2480 | P | 0.032 | [6.2e-10,0.26] |
| 2481 | N | 0.024 | [6.2e-10,0.26] |
| 2482 | K | 0.024 | [6.2e-10,0.26] |
| 2483 | Y | 0.032 | [6.2e-10,0.26] |
| 2484 | W | 0.035 | [6.2e-10,0.26] |
| 2485 | N | 0.024 | [6.2e-10,0.26] |
| 2486 | S | 0.033 | [6.2e-10,0.26] |
| 2487 | S | 0.035 | [6.2e-10,0.26] |
| 2488 | T | 0.026 | [6.2e-10,0.26] |
| 2489 | A | 0.026 | [6.2e-10,0.26] |
| 2490 | T | 0.027 | [6.2e-10,0.26] |


| 2491 | S | 0.035 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2492 | L | 0.035 | [6.2e-10,0.26] |
| 2493 | C | 0.033 | [6.2e-10,0.26] |
| 2494 | N | 0.024 | [6.2e-10,0.26] |
| 2495 | I | 0.025 | [6.2e-10,0.26] |
| 2496 | F | 0.032 | [6.2e-10,0.26] |
| 2497 | R | 0.025 | [6.2e-10,0.26] |
| 2498 | G | 0.027 | [6.2e-10,0.26] |
| 2499 | S | 0.027 | [6.2e-10,0.26] |
| 2500 | Y | 0.034 | [6.2e-10,0.26] |
| 2501 | L | 0.035 | [6.2e-10,0.26] |
| 2502 | A | 0.027 | [6.2e-10,0.26] |
| 2503 | G | 0.026 | [6.2e-10,0.26] |
| 2504 | A | 0.029 | [6.2e-10,0.26] |
| 2505 | S | 0.035 | [6.2e-10,0.26] |
| 2506 | L | 0.035 | [6.2e-10,0.26] |
| 2507 | I | 0.026 | [6.2e-10,0.26] |
| 2508 | Y | 0.033 | [6.2e-10,0.26] |
| 2509 | T | 0.22 | [0.013,1] |
| 2510 | V | 0.024 | [6.2e-10,0.26] |
| 2511 | T | 0.026 | [6.2e-10,0.26] |
| 2512 | R | 0.026 | [6.2e-10,0.26] |
| 2513 | N | 0.025 | [6.2e-10,0.26] |
| 2514 | A | 0.028 | [6.2e-10,0.26] |
| 2515 | G | 0.027 | [6.2e-10,0.26] |
| 2516 | L | 0.035 | [6.2e-10,0.26] |
| 2517 | V | 0.027 | [6.2e-10,0.26] |
| 2518 | K | 0.023 | [6.2e-10,0.26] |
| 2519 | R | 0.026 | [6.2e-10,0.26] |
| 2520 | R | 0.036 | [6.2e-10,0.26] |
| 2521 | G | 0.026 | [6.2e-10,0.26] |
| 2522 | G | 0.03 | [6.2e-10,0.26] |
| 2523 | G | 0.026 | [6.2e-10,0.26] |
| 2524 | T | 0.024 | [6.2e-10,0.26] |
| 2525 | G | 0.027 | [6.2e-10,0.26] |
| 2526 | E | 0.022 | [6.2e-10,0.26] |
| 2527 | T | 0.028 | [6.2e-10,0.26] |
| 2528 | L | 0.035 | [6.2e-10,0.26] |
| 2529 | G | 0.026 | [6.2e-10,0.26] |
| 2530 | E | 0.022 | [6.2e-10,0.26] |
| 2531 | K | 0.023 | [6.2e-10,0.26] |
| 2532 | W | 0.035 | [6.2e-10,0.26] |
| 2533 | K | 0.024 | [6.2e-10,0.26] |
| 2534 | A | 0.027 | [6.2e-10,0.26] |
| 2535 | R | 0.033 | [6.2e-10,0.26] |
| 2536 | L | 0.035 | [6.2e-10,0.26] |
| 2537 | N | 0.025 | [6.2e-10,0.26] |


| 2538 | Q | 0.033 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2539 | M | 0.018 | [6.2e-10,0.26] |
| 2540 | S | 0.032 | [6.2e-10,0.26] |
| 2541 | A | 0.026 | [6.2e-10,0.26] |
| 2542 | L | 0.035 | [6.2e-10,0.26] |
| 2543 | E | 0.022 | [6.2e-10,0.26] |
| 2544 | F | 0.03 | [6.2e-10,0.26] |
| 2545 | Y | 0.033 | [6.2e-10,0.26] |
| 2546 | S | 0.035 | [6.2e-10,0.26] |
| 2547 | Y | 0.033 | [6.2e-10,0.26] |
| 2548 | K | 0.025 | [6.2e-10,0.26] |
| 2549 | K | 0.023 | [6.2e-10,0.26] |
| 2550 | S | 0.035 | [6.2e-10,0.26] |
| 2551 | G | 0.026 | [6.2e-10,0.26] |
| 2552 | 1 | 0.024 | [6.2e-10,0.26] |
| 2553 | T | 0.027 | [6.2e-10,0.26] |
| 2554 | E | 0.024 | [6.2e-10,0.26] |
| 2555 | V | 0.023 | [6.2e-10,0.26] |
| 2556 | C | 0.034 | [6.2e-10,0.26] |
| 2557 | R | 0.025 | [6.2e-10,0.26] |
| 2558 | E | 0.023 | [6.2e-10,0.26] |
| 2559 | E | 0.022 | [6.2e-10,0.26] |
| 2560 | A | 0.026 | [6.2e-10,0.26] |
| 2561 | R | 0.033 | [6.2e-10,0.26] |
| 2562 | R | 0.033 | [6.2e-10,0.26] |
| 2563 | A | 0.026 | [6.2e-10,0.26] |
| 2564 | L | 0.032 | [6.2e-10,0.26] |
| 2565 | K | 0.023 | [6.2e-10,0.26] |
| 2566 | D | 0.22 | [0.013,1] |
| 2567 | G | 0.027 | [6.2e-10,0.26] |
| 2568 | V | 0.023 | [6.2e-10,0.26] |
| 2569 | A | 0.025 | [6.2e-10,0.26] |
| 2570 | T | 0.026 | [6.2e-10,0.26] |
| 2571 | G | 0.027 | [6.2e-10,0.26] |
| 2572 | G | 0.026 | [6.2e-10,0.26] |
| 2573 | H | 0.033 | [6.2e-10,0.26] |
| 2574 | A | 0.029 | [6.2e-10,0.26] |
| 2575 | V | 0.025 | [6.2e-10,0.26] |
| 2576 | S | 0.033 | [6.2e-10,0.26] |
| 2577 | R | 0.035 | [6.2e-10,0.26] |
| 2578 | G | 0.027 | [6.2e-10,0.26] |
| 2579 | S | 0.025 | [6.2e-10,0.26] |
| 2580 | A | 0.025 | [6.2e-10,0.26] |
| 2581 | K | 0.023 | [6.2e-10,0.26] |
| 2582 | L | 0.28 | [0.013,1] |
| 2583 | R | 0.026 | [6.2e-10,0.26] |
| 2584 | W | 0.035 | [6.2e-10,0.26] |


| 2585 | L | 0.035 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2586 | V | 0.21 | [0.013,1] |
| 2587 | E | 0.022 | [6.2e-10,0.26] |
| 2588 | R | 0.026 | [6.2e-10,0.26] |
| 2589 | G | 0.027 | [6.2e-10,0.26] |
| 2590 | Y | 0.033 | [6.2e-10,0.26] |
| 2591 | L | 0.035 | [6.2e-10,0.26] |
| 2592 | Q | 0.033 | [6.2e-10,0.26] |
| 2593 | P | 0.033 | [6.2e-10,0.26] |
| 2594 | Y | 0.52 | [0.054,1] |
| 2595 | G | 0.026 | [6.2e-10,0.26] |
| 2596 | K | 0.023 | [6.2e-10,0.26] |
| 2597 | V | 0.028 | [6.2e-10,0.26] |
| 2598 | 1 | 0.24 | [0.013,1] |
| 2599 | D | 0.024 | [6.2e-10,0.26] |
| 2600 | L | 0.034 | [6.2e-10,0.26] |
| 2601 | G | 0.027 | [6.2e-10,0.26] |
| 2602 | C | 0.035 | [6.2e-10,0.26] |
| 2603 | G | 0.026 | [6.2e-10,0.26] |
| 2604 | R | 0.026 | [6.2e-10,0.26] |
| 2605 | G | 0.024 | [6.2e-10,0.26] |
| 2606 | G | 0.026 | [6.2e-10,0.26] |
| 2607 | W | 0.035 | [6.2e-10,0.26] |
| 2608 | S | 0.026 | [6.2e-10,0.26] |
| 2609 | Y | 0.035 | [6.2e-10,0.26] |
| 2610 | Y | 0.034 | [6.2e-10,0.26] |
| 2611 | A | 0.23 | [0.013,1] |
| 2612 | A | 0.026 | [6.2e-10,0.26] |
| 2613 | T | 0.026 | [6.2e-10,0.26] |
| 2614 | 1 | 0.024 | [6.2e-10,0.26] |
| 2615 | R | 0.034 | [6.2e-10,0.26] |
| 2616 | K | 0.025 | [6.2e-10,0.26] |
| 2617 | v | 0.025 | [6.2e-10,0.26] |
| 2618 | Q | 0.034 | [6.2e-10,0.26] |
| 2619 | E | 0.023 | [6.2e-10,0.26] |
| 2620 | V | 0.024 | [6.2e-10,0.26] |
| 2621 | K | 0.38 | [0.054,1] |
| 2622 | G | 0.027 | [6.2e-10,0.26] |
| 2623 | Y | 0.032 | [6.2e-10,0.26] |
| 2624 | T | 0.026 | [6.2e-10,0.26] |
| 2625 | K | 0.023 | [6.2e-10,0.26] |
| 2626 | G | 0.027 | [6.2e-10,0.26] |
| 2627 | G | 0.028 | [6.2e-10,0.26] |
| 2628 | P | 0.035 | [6.2e-10,0.26] |
| 2629 | G | 0.029 | [6.2e-10,0.26] |
| 2630 | H | 0.033 | [6.2e-10,0.26] |
| 2631 | E | 0.024 | [6.2e-10,0.26] |


| 2632 | E | 0.024 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2633 | P | 0.033 | [6.2e-10,0.26] |
| 2634 | T | 0.29 | [0.054,1] |
| 2635 | L | 0.035 | [6.2e-10,0.26] |
| 2636 | v | 0.023 | [6.2e-10,0.26] |
| 2637 | Q | 0.035 | [6.2e-10,0.26] |
| 2638 | S | 0.024 | [6.2e-10,0.26] |
| 2639 | Y | 0.036 | [6.2e-10,0.26] |
| 2640 | G | 0.024 | [6.2e-10,0.26] |
| 2641 | W | 0.035 | [6.2e-10,0.26] |
| 2642 | N | 0.024 | [6.2e-10,0.26] |
| 2643 | I | 0.02 | [6.2e-10,0.26] |
| 2644 | V | 0.028 | [6.2e-10,0.26] |
| 2645 | R | 0.036 | [6.2e-10,0.26] |
| 2646 | L | 0.033 | [6.2e-10,0.26] |
| 2647 | K | 0.023 | [6.2e-10,0.26] |
| 2648 | S | 0.027 | [6.2e-10,0.26] |
| 2649 | G | 0.026 | [6.2e-10,0.26] |
| 2650 | V | 0.023 | [6.2e-10,0.26] |
| 2651 | D | 0.023 | [6.2e-10,0.26] |
| 2652 | V | 0.025 | [6.2e-10,0.26] |
| 2653 | F | 0.031 | [6.2e-10,0.26] |
| 2654 | H | 0.031 | [6.2e-10,0.26] |
| 2655 | M | 0.018 | [6.2e-10,0.26] |
| 2656 | A | 0.023 | [6.2e-10,0.26] |
| 2657 | A | 0.029 | [6.2e-10,0.26] |
| 2658 | E | 0.022 | [6.2e-10,0.26] |
| 2659 | S | 0.27 | [0.013,1] |
| 2660 | C | 0.035 | [6.2e-10,0.26] |
| 2661 | D | 0.023 | [6.2e-10,0.26] |
| 2662 | T | 0.029 | [6.2e-10,0.26] |
| 2663 | L | 0.035 | [6.2e-10,0.26] |
| 2664 | L | 0.035 | [6.2e-10,0.26] |
| 2665 | C | 0.035 | [6.2e-10,0.26] |
| 2666 | D | 0.023 | [6.2e-10,0.26] |
| 2667 | 1 | 0.02 | [6.2e-10,0.26] |
| 2668 | G | 0.029 | [6.2e-10,0.26] |
| 2669 | E | 0.022 | [6.2e-10,0.26] |
| 2670 | S | 0.035 | [6.2e-10,0.26] |
| 2671 | S | 0.035 | [6.2e-10,0.26] |
| 2672 | S | 0.036 | [6.2e-10,0.26] |
| 2673 | S | 0.027 | [6.2e-10,0.26] |
| 2674 | P | 0.036 | [6.2e-10,0.26] |
| 2675 | E | 0.024 | [6.2e-10,0.26] |
| 2676 | V | 0.023 | [6.2e-10,0.26] |
| 2677 | E | 0.024 | [6.2e-10,0.26] |
| 2678 | E | 0.023 | [6.2e-10,0.26] |


| 2679 | A | 0.22 | [0.013,1] |
| :---: | :---: | :---: | :---: |
| 2680 | R | 0.037 | [6.2e-10,0.26] |
| 2681 | T | 0.025 | [6.2e-10,0.26] |
| 2682 | L | 0.032 | [6.2e-10,0.26] |
| 2683 | R | 0.026 | [6.2e-10,0.26] |
| 2684 | V | 0.024 | [6.2e-10,0.26] |
| 2685 | L | 0.032 | [6.2e-10,0.26] |
| 2686 | S | 0.034 | [6.2e-10,0.26] |
| 2687 | M | 0.018 | [6.2e-10,0.26] |
| 2688 | V | 0.023 | [6.2e-10,0.26] |
| 2689 | G | 0.21 | [0.013,1] |
| 2690 | D | 0.024 | [6.2e-10,0.26] |
| 2691 | W | 0.035 | [6.2e-10,0.26] |
| 2692 | L | 0.035 | [6.2e-10,0.26] |
| 2693 | E | 0.023 | [6.2e-10,0.26] |
| 2694 | K | 0.21 | [0.013,1] |
| 2695 | R | 0.026 | [6.2e-10,0.26] |
| 2696 | P | 0.032 | [6.2e-10,0.26] |
| 2697 | G | 0.024 | [6.2e-10,0.26] |
| 2698 | A | 0.026 | [6.2e-10,0.26] |
| 2699 | F | 0.031 | [6.2e-10,0.26] |
| 2700 | C | 0.034 | [6.2e-10,0.26] |
| 2701 | I | 0.19 | [0.013,0.26] |
| 2702 | K | 0.023 | [6.2e-10,0.26] |
| 2703 | V | 0.023 | [6.2e-10,0.26] |
| 2704 | L | 0.035 | [6.2e-10,0.26] |
| 2705 | C | 0.032 | [6.2e-10,0.26] |
| 2706 | P | 0.032 | [6.2e-10,0.26] |
| 2707 | Y | 0.032 | [6.2e-10,0.26] |
| 2708 | T | 0.026 | [6.2e-10,0.26] |
| 2709 | S | 0.024 | [6.2e-10,0.26] |
| 2710 | T | 0.029 | [6.2e-10,0.26] |
| 2711 | M | 0.018 | [6.2e-10,0.26] |
| 2712 | M | 0.018 | [6.2e-10,0.26] |
| 2713 | E | 0.023 | [6.2e-10,0.26] |
| 2714 | T | 0.026 | [6.2e-10,0.26] |
| 2715 | L | 0.21 | [0.013,1] |
| 2716 | E | 0.022 | [6.2e-10,0.26] |
| 2717 | R | 0.039 | [6.2e-10,0.26] |
| 2718 | L | 0.035 | [6.2e-10,0.26] |
| 2719 | Q | 0.034 | [6.2e-10,0.26] |
| 2720 | R | 0.036 | [6.2e-10,0.26] |
| 2721 | R | 0.023 | [6.2e-10,0.26] |
| 2722 | Y | 0.56 | [0.054,1] |
| 2723 | G | 0.024 | [6.2e-10,0.26] |
| 2724 | G | 0.027 | [6.2e-10,0.26] |
| 2725 | G | 0.027 | [6.2e-10,0.26] |


| 2726 | L | 0.036 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2727 | V | 0.025 | [6.2e-10,0.26] |
| 2728 | R | 0.026 | [6.2e-10,0.26] |
| 2729 | V | 0.023 | [6.2e-10,0.26] |
| 2730 | P | 0.032 | [6.2e-10,0.26] |
| 2731 | L | 0.038 | [6.2e-10,0.26] |
| 2732 | S | 0.28 | [0.013,1] |
| 2733 | R | 0.033 | [6.2e-10,0.26] |
| 2734 | N | 0.024 | [6.2e-10,0.26] |
| 2735 | S | 0.034 | [6.2e-10,0.26] |
| 2736 | T | 0.026 | [6.2e-10,0.26] |
| 2737 | H | 0.033 | [6.2e-10,0.26] |
| 2738 | E | 0.022 | [6.2e-10,0.26] |
| 2739 | M | 0.018 | [6.2e-10,0.26] |
| 2740 | Y | 0.034 | [6.2e-10,0.26] |
| 2741 | W | 0.035 | [6.2e-10,0.26] |
| 2742 | V | 0.025 | [6.2e-10,0.26] |
| 2743 | S | 0.036 | [6.2e-10,0.26] |
| 2744 | G | 0.026 | [6.2e-10,0.26] |
| 2745 | A | 0.025 | [6.2e-10,0.26] |
| 2746 | K | 0.025 | [6.2e-10,0.26] |
| 2747 | S | 0.025 | [6.2e-10,0.26] |
| 2748 | N | 0.024 | [6.2e-10,0.26] |
| 2749 | 1 | 0.6 | [0.26,1] |
| 2750 | I | 0.02 | [6.2e-10,0.26] |
| 2751 | K | 0.024 | [6.2e-10,0.26] |
| 2752 | S | 0.027 | [6.2e-10,0.26] |
| 2753 | V | 0.023 | [6.2e-10,0.26] |
| 2754 | S | 0.033 | [6.2e-10,0.26] |
| 2755 | T | 0.026 | [6.2e-10,0.26] |
| 2756 | T | 0.025 | [6.2e-10,0.26] |
| 2757 | S | 0.026 | [6.2e-10,0.26] |
| 2758 | Q | 0.033 | [6.2e-10,0.26] |
| 2759 | L | 0.032 | [6.2e-10,0.26] |
| 2760 | L | 0.032 | [6.2e-10,0.26] |
| 2761 | L | 0.035 | [6.2e-10,0.26] |
| 2762 | G | 0.026 | [6.2e-10,0.26] |
| 2763 | R | 0.033 | [6.2e-10,0.26] |
| 2764 | M | 0.018 | [6.2e-10,0.26] |
| 2765 | D | 0.22 | [0.013,1] |
| 2766 | G | 0.024 | [6.2e-10,0.26] |
| 2767 | P | 0.033 | [6.2e-10,0.26] |
| 2768 | R | 0.023 | [6.2e-10,0.26] |
| 2769 | R | 0.023 | [6.2e-10,0.26] |
| 2770 | P | 0.032 | [6.2e-10,0.26] |
| 2771 | V | 0.023 | [6.2e-10,0.26] |
| 2772 | K | 0.025 | [6.2e-10,0.26] |


| 2773 | Y | 0.036 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2774 | E | 0.022 | [6.2e-10,0.26] |
| 2775 | E | 0.022 | [6.2e-10,0.26] |
| 2776 | D | 0.026 | [6.2e-10,0.26] |
| 2777 | V | 0.023 | [6.2e-10,0.26] |
| 2778 | N | 0.21 | [0.013,1] |
| 2779 | L | 0.032 | [6.2e-10,0.26] |
| 2780 | G | 0.026 | [6.2e-10,0.26] |
| 2781 | S | 0.034 | [6.2e-10,0.26] |
| 2782 | G | 0.026 | [6.2e-10,0.26] |
| 2783 | T | 0.025 | [6.2e-10,0.26] |
| 2784 | R | 0.038 | [6.2e-10,0.26] |
| 2785 | A | 0.029 | [6.2e-10,0.26] |
| 2786 | V | 0.023 | [6.2e-10,0.26] |
| 2787 | A | 0.39 | [0.054,1] |
| 2788 | S | 0.024 | [6.2e-10,0.26] |
| 2789 | C | 0.034 | [6.2e-10,0.26] |
| 2790 | A | 0.029 | [6.2e-10,0.26] |
| 2791 | E | 0.023 | [6.2e-10,0.26] |
| 2792 | A | 0.029 | [6.2e-10,0.26] |
| 2793 | P | 0.033 | [6.2e-10,0.26] |
| 2794 | N | 0.024 | [6.2e-10,0.26] |
| 2795 | L | 0.18 | [0.013,0.26] |
| 2796 | K | 0.023 | [6.2e-10,0.26] |
| 2797 | 1 | 0.21 | [0.013,1] |
| 2798 | 1 | 0.027 | [6.2e-10,0.26] |
| 2799 | G | 0.029 | [6.2e-10,0.26] |
| 2800 | N | 0.55 | [0.26,1] |
| 2801 | R | 0.033 | [6.2e-10,0.26] |
| 2802 | V | 0.25 | [0.013,1] |
| 2803 | E | 0.022 | [6.2e-10,0.26] |
| 2804 | R | 0.025 | [6.2e-10,0.26] |
| 2805 | I | 0.024 | [6.2e-10,0.26] |
| 2806 | R | 0.033 | [6.2e-10,0.26] |
| 2807 | S | 0.41 | [0.054,1] |
| 2808 | E | 0.023 | [6.2e-10,0.26] |
| 2809 | H | 0.032 | [6.2e-10,0.26] |
| 2810 | A | 0.025 | [6.2e-10,0.26] |
| 2811 | E | 0.024 | [6.2e-10,0.26] |
| 2812 | T | 0.025 | [6.2e-10,0.26] |
| 2813 | W | 0.035 | [6.2e-10,0.26] |
| 2814 | F | 0.03 | [6.2e-10,0.26] |
| 2815 | F | 0.27 | [0.013,1] |
| 2816 | D | 0.025 | [6.2e-10,0.26] |
| 2817 | E | 0.023 | [6.2e-10,0.26] |
| 2818 | N | 0.024 | [6.2e-10,0.26] |
| 2819 | H | 0.03 | [6.2e-10,0.26] |


| 2820 | P | 0.032 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2821 | Y | 0.033 | [6.2e-10,0.26] |
| 2822 | R | 0.023 | [6.2e-10,0.26] |
| 2823 | T | 0.026 | [6.2e-10,0.26] |
| 2824 | W | 0.035 | [6.2e-10,0.26] |
| 2825 | A | 0.027 | [6.2e-10,0.26] |
| 2826 | Y | 0.032 | [6.2e-10,0.26] |
| 2827 | H | 0.033 | [6.2e-10,0.26] |
| 2828 | G | 0.024 | [6.2e-10,0.26] |
| 2829 | S | 0.025 | [6.2e-10,0.26] |
| 2830 | Y | 0.033 | [6.2e-10,0.26] |
| 2831 | E | 0.21 | [0.013,1] |
| 2832 | A | 0.026 | [6.2e-10,0.26] |
| 2833 | P | 0.034 | [6.2e-10,0.26] |
| 2834 | T | 0.025 | [6.2e-10,0.26] |
| 2835 | Q | 0.035 | [6.2e-10,0.26] |
| 2836 | G | 0.024 | [6.2e-10,0.26] |
| 2837 | S | 0.035 | [6.2e-10,0.26] |
| 2838 | A | 0.023 | [6.2e-10,0.26] |
| 2839 | S | 0.035 | [6.2e-10,0.26] |
| 2840 | S | 0.034 | [6.2e-10,0.26] |
| 2841 | L | 0.033 | [6.2e-10,0.26] |
| 2842 | 1 | 0.22 | [0.013,1] |
| 2843 | N | 0.024 | [6.2e-10,0.26] |
| 2844 | G | 0.024 | [6.2e-10,0.26] |
| 2845 | V | 0.029 | [6.2e-10,0.26] |
| 2846 | V | 0.028 | [6.2e-10,0.26] |
| 2847 | R | 0.025 | [6.2e-10,0.26] |
| 2848 | L | 0.032 | [6.2e-10,0.26] |
| 2849 | L | 0.035 | [6.2e-10,0.26] |
| 2850 | S | 0.035 | [6.2e-10,0.26] |
| 2851 | K | 0.023 | [6.2e-10,0.26] |
| 2852 | P | 0.033 | [6.2e-10,0.26] |
| 2853 | W | 0.035 | [6.2e-10,0.26] |
| 2854 | D | 0.026 | [6.2e-10,0.26] |
| 2855 | V | 0.024 | [6.2e-10,0.26] |
| 2856 | V | 0.023 | [6.2e-10,0.26] |
| 2857 | T | 0.03 | [6.2e-10,0.26] |
| 2858 | G | 0.027 | [6.2e-10,0.26] |
| 2859 | V | 0.027 | [6.2e-10,0.26] |
| 2860 | T | 0.026 | [6.2e-10,0.26] |
| 2861 | G | 0.027 | [6.2e-10,0.26] |
| 2862 | 1 | 0.02 | [6.2e-10,0.26] |
| 2863 | A | 0.027 | [6.2e-10,0.26] |
| 2864 | M | 0.018 | [6.2e-10,0.26] |
| 2865 | T | 0.028 | [6.2e-10,0.26] |
| 2866 | D | 0.023 | [6.2e-10,0.26] |


| 2867 | T | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2868 | T | 0.026 | [6.2e-10,0.26] |
| 2869 | P | 0.032 | [6.2e-10,0.26] |
| 2870 | Y | 0.034 | [6.2e-10,0.26] |
| 2871 | G | 0.027 | [6.2e-10,0.26] |
| 2872 | Q | 0.034 | [6.2e-10,0.26] |
| 2873 | Q | 0.035 | [6.2e-10,0.26] |
| 2874 | R | 0.026 | [6.2e-10,0.26] |
| 2875 | V | 0.027 | [6.2e-10,0.26] |
| 2876 | F | 0.03 | [6.2e-10,0.26] |
| 2877 | K | 0.024 | [6.2e-10,0.26] |
| 2878 | E | 0.024 | [6.2e-10,0.26] |
| 2879 | K | 0.025 | [6.2e-10,0.26] |
| 2880 | V | 0.023 | [6.2e-10,0.26] |
| 2881 | D | 0.023 | [6.2e-10,0.26] |
| 2882 | T | 0.028 | [6.2e-10,0.26] |
| 2883 | R | 0.023 | [6.2e-10,0.26] |
| 2884 | V | 0.023 | [6.2e-10,0.26] |
| 2885 | P | 0.032 | [6.2e-10,0.26] |
| 2886 | D | 0.025 | [6.2e-10,0.26] |
| 2887 | P | 0.033 | [6.2e-10,0.26] |
| 2888 | Q | 0.035 | [6.2e-10,0.26] |
| 2889 | E | 0.024 | [6.2e-10,0.26] |
| 2890 | G | 0.026 | [6.2e-10,0.26] |
| 2891 | T | 0.03 | [6.2e-10,0.26] |
| 2892 | R | 0.034 | [6.2e-10,0.26] |
| 2893 | Q | 0.28 | [0.013,1] |
| 2894 | V | 0.87 | [0.26,1] |
| 2895 | M | 0.018 | [6.2e-10,0.26] |
| 2896 | N | 0.21 | [0.013,1] |
| 2897 | M | 0.28 | [0.054,1] |
| 2898 | V | 0.026 | [6.2e-10,0.26] |
| 2899 | S | 0.035 | [6.2e-10,0.26] |
| 2900 | S | 0.033 | [6.2e-10,0.26] |
| 2901 | W | 0.035 | [6.2e-10,0.26] |
| 2902 | L | 0.036 | [6.2e-10,0.26] |
| 2903 | W | 0.035 | [6.2e-10,0.26] |
| 2904 | K | 0.023 | [6.2e-10,0.26] |
| 2905 | E | 0.022 | [6.2e-10,0.26] |
| 2906 | L | 0.036 | [6.2e-10,0.26] |
| 2907 | G | 0.026 | [6.2e-10,0.26] |
| 2908 | K | 0.025 | [6.2e-10,0.26] |
| 2909 | H | 0.27 | [0.013,1] |
| 2910 | K | 0.023 | [6.2e-10,0.26] |
| 2911 | R | 0.033 | [6.2e-10,0.26] |
| 2912 | P | 0.032 | [6.2e-10,0.26] |
| 2913 | R | 0.037 | [6.2e-10,0.26] |


| 2914 | V | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2915 | C | 0.033 | [6.2e-10,0.26] |
| 2916 | T | 0.026 | [6.2e-10,0.26] |
| 2917 | K | 0.025 | [6.2e-10,0.26] |
| 2918 | E | 0.024 | [6.2e-10,0.26] |
| 2919 | E | 0.022 | [6.2e-10,0.26] |
| 2920 | F | 0.03 | [6.2e-10,0.26] |
| 2921 | 1 | 0.024 | [6.2e-10,0.26] |
| 2922 | N | 0.025 | [6.2e-10,0.26] |
| 2923 | K | 0.023 | [6.2e-10,0.26] |
| 2924 | V | 0.025 | [6.2e-10,0.26] |
| 2925 | R | 0.034 | [6.2e-10,0.26] |
| 2926 | S | 0.024 | [6.2e-10,0.26] |
| 2927 | N | 0.027 | [6.2e-10,0.26] |
| 2928 | A | 0.025 | [6.2e-10,0.26] |
| 2929 | A | 0.025 | [6.2e-10,0.26] |
| 2930 | L | 0.036 | [6.2e-10,0.26] |
| 2931 | G | 0.026 | [6.2e-10,0.26] |
| 2932 | A | 0.025 | [6.2e-10,0.26] |
| 2933 | 1 | 0.02 | [6.2e-10,0.26] |
| 2934 | F | 0.033 | [6.2e-10,0.26] |
| 2935 | E | 0.024 | [6.2e-10,0.26] |
| 2936 | E | 0.022 | [6.2e-10,0.26] |
| 2937 | E | 0.024 | [6.2e-10,0.26] |
| 2938 | K | 0.025 | [6.2e-10,0.26] |
| 2939 | E | 0.024 | [6.2e-10,0.26] |
| 2940 | W | 0.035 | [6.2e-10,0.26] |
| 2941 | K | 0.023 | [6.2e-10,0.26] |
| 2942 | T | 0.026 | [6.2e-10,0.26] |
| 2943 | A | 0.027 | [6.2e-10,0.26] |
| 2944 | V | 0.024 | [6.2e-10,0.26] |
| 2945 | E | 0.024 | [6.2e-10,0.26] |
| 2946 | A | 0.029 | [6.2e-10,0.26] |
| 2947 | V | 0.023 | [6.2e-10,0.26] |
| 2948 | N | 0.025 | [6.2e-10,0.26] |
| 2949 | D | 0.026 | [6.2e-10,0.26] |
| 2950 | P | 0.032 | [6.2e-10,0.26] |
| 2951 | R | 0.024 | [6.2e-10,0.26] |
| 2952 | F | 0.031 | [6.2e-10,0.26] |
| 2953 | W | 0.035 | [6.2e-10,0.26] |
| 2954 | A | 0.027 | [6.2e-10,0.26] |
| 2955 | L | 0.037 | [6.2e-10,0.26] |
| 2956 | V | 0.023 | [6.2e-10,0.26] |
| 2957 | D | 0.024 | [6.2e-10,0.26] |
| 2958 | K | 0.2 | [0.013,1] |
| 2959 | E | 0.023 | [6.2e-10,0.26] |
| 2960 | R | 0.026 | [6.2e-10,0.26] |


| 2961 | E | 0.023 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 2962 | H | 0.031 | [6.2e-10,0.26] |
| 2963 | H | 0.03 | [6.2e-10,0.26] |
| 2964 | L | 0.035 | [6.2e-10,0.26] |
| 2965 | R | 0.026 | [6.2e-10,0.26] |
| 2966 | G | 0.027 | [6.2e-10,0.26] |
| 2967 | E | 0.022 | [6.2e-10,0.26] |
| 2968 | C | 0.035 | [6.2e-10,0.26] |
| 2969 | Q | 0.26 | [0.013,1] |
| 2970 | S | 0.024 | [6.2e-10,0.26] |
| 2971 | C | 0.035 | [6.2e-10,0.26] |
| 2972 | V | 0.023 | [6.2e-10,0.26] |
| 2973 | Y | 0.032 | [6.2e-10,0.26] |
| 2974 | N | 0.024 | [6.2e-10,0.26] |
| 2975 | M | 0.018 | [6.2e-10,0.26] |
| 2976 | M | 0.018 | [6.2e-10,0.26] |
| 2977 | G | 0.027 | [6.2e-10,0.26] |
| 2978 | K | 0.025 | [6.2e-10,0.26] |
| 2979 | R | 0.026 | [6.2e-10,0.26] |
| 2980 | E | 0.024 | [6.2e-10,0.26] |
| 2981 | K | 0.023 | [6.2e-10,0.26] |
| 2982 | K | 0.023 | [6.2e-10,0.26] |
| 2983 | Q | 0.035 | [6.2e-10,0.26] |
| 2984 | G | 0.026 | [6.2e-10,0.26] |
| 2985 | E | 0.024 | [6.2e-10,0.26] |
| 2986 | F | 0.031 | [6.2e-10,0.26] |
| 2987 | G | 0.025 | [6.2e-10,0.26] |
| 2988 | K | 0.024 | [6.2e-10,0.26] |
| 2989 | A | 0.025 | [6.2e-10,0.26] |
| 2990 | K | 0.024 | [6.2e-10,0.26] |
| 2991 | G | 0.026 | [6.2e-10,0.26] |
| 2992 | S | 0.024 | [6.2e-10,0.26] |
| 2993 | R | 0.033 | [6.2e-10,0.26] |
| 2994 | A | 0.025 | [6.2e-10,0.26] |
| 2995 | I | 0.024 | [6.2e-10,0.26] |
| 2996 | W | 0.035 | [6.2e-10,0.26] |
| 2997 | Y | 0.033 | [6.2e-10,0.26] |
| 2998 | M | 0.018 | [6.2e-10,0.26] |
| 2999 | W | 0.035 | [6.2e-10,0.26] |
| 3000 | L | 0.036 | [6.2e-10,0.26] |
| 3001 | G | 0.026 | [6.2e-10,0.26] |
| 3002 | A | 0.027 | [6.2e-10,0.26] |
| 3003 | R | 0.026 | [6.2e-10,0.26] |
| 3004 | F | 0.032 | [6.2e-10,0.26] |
| 3005 | L | 0.036 | [6.2e-10,0.26] |
| 3006 | E | 0.022 | [6.2e-10,0.26] |
| 3007 | F | 0.032 | [6.2e-10,0.26] |


| 3008 | E | 0.024 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 3009 | A | 0.4 | [0.054,1] |
| 3010 | L | 0.035 | [6.2e-10,0.26] |
| 3011 | G | 0.026 | [6.2e-10,0.26] |
| 3012 | F | 0.03 | [6.2e-10,0.26] |
| 3013 | L | 0.035 | [6.2e-10,0.26] |
| 3014 | N | 0.024 | [6.2e-10,0.26] |
| 3015 | E | 0.022 | [6.2e-10,0.26] |
| 3016 | D | 0.024 | [6.2e-10,0.26] |
| 3017 | H | 0.031 | [6.2e-10,0.26] |
| 3018 | W | 0.035 | [6.2e-10,0.26] |
| 3019 | M | 0.018 | [6.2e-10,0.26] |
| 3020 | G | 0.025 | [6.2e-10,0.26] |
| 3021 | R | 0.026 | [6.2e-10,0.26] |
| 3022 | E | 0.023 | [6.2e-10,0.26] |
| 3023 | N | 0.024 | [6.2e-10,0.26] |
| 3024 | S | 0.035 | [6.2e-10,0.26] |
| 3025 | G | 0.027 | [6.2e-10,0.26] |
| 3026 | G | 0.029 | [6.2e-10,0.26] |
| 3027 | G | 0.029 | [6.2e-10,0.26] |
| 3028 | V | 0.028 | [6.2e-10,0.26] |
| 3029 | E | 0.024 | [6.2e-10,0.26] |
| 3030 | G | 0.024 | [6.2e-10,0.26] |
| 3031 | L | 0.036 | [6.2e-10,0.26] |
| 3032 | G | 0.027 | [6.2e-10,0.26] |
| 3033 | L | 0.036 | [6.2e-10,0.26] |
| 3034 | Q | 0.035 | [6.2e-10,0.26] |
| 3035 | R | 0.025 | [6.2e-10,0.26] |
| 3036 | L | 0.034 | [6.2e-10,0.26] |
| 3037 | G | 0.026 | [6.2e-10,0.26] |
| 3038 | Y | 0.036 | [6.2e-10,0.26] |
| 3039 | V | 0.41 | [0.054,1] |
| 3040 | L | 0.037 | [6.2e-10,0.26] |
| 3041 | E | 0.024 | [6.2e-10,0.26] |
| 3042 | E | 0.024 | [6.2e-10,0.26] |
| 3043 | M | 0.018 | [6.2e-10,0.26] |
| 3044 | S | 0.39 | [0.054,1] |
| 3045 | R | 0.52 | [0.054,1] |
| 3046 | T | 0.37 | [0.054,1] |
| 3047 | P | 0.032 | [6.2e-10,0.26] |
| 3048 | G | 0.027 | [6.2e-10,0.26] |
| 3049 | G | 0.026 | [6.2e-10,0.26] |
| 3050 | K | 0.21 | [0.013,1] |
| 3051 | M | 0.018 | [6.2e-10,0.26] |
| 3052 | Y | 0.035 | [6.2e-10,0.26] |
| 3053 | A | 0.025 | [6.2e-10,0.26] |
| 3054 | D | 0.026 | [6.2e-10,0.26] |


| 3055 | D | 0.024 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 3056 | T | 0.027 | [6.2e-10,0.26] |
| 3057 | A | 0.029 | [6.2e-10,0.26] |
| 3058 | G | 0.026 | [6.2e-10,0.26] |
| 3059 | W | 0.035 | [6.2e-10,0.26] |
| 3060 | D | 0.023 | [6.2e-10,0.26] |
| 3061 | T | 0.026 | [6.2e-10,0.26] |
| 3062 | R | 0.033 | [6.2e-10,0.26] |
| 3063 | 1 | 0.026 | [6.2e-10,0.26] |
| 3064 | S | 0.026 | [6.2e-10,0.26] |
| 3065 | R | 0.34 | [0.054,1] |
| 3066 | F | 0.033 | [6.2e-10,0.26] |
| 3067 | D | 0.026 | [6.2e-10,0.26] |
| 3068 | L | 0.035 | [6.2e-10,0.26] |
| 3069 | E | 0.022 | [6.2e-10,0.26] |
| 3070 | N | 0.027 | [6.2e-10,0.26] |
| 3071 | E | 0.024 | [6.2e-10,0.26] |
| 3072 | A | 0.027 | [6.2e-10,0.26] |
| 3073 | L | 0.036 | [6.2e-10,0.26] |
| 3074 | 1 | 0.025 | [6.2e-10,0.26] |
| 3075 | T | 0.027 | [6.2e-10,0.26] |
| 3076 | N | 0.024 | [6.2e-10,0.26] |
| 3077 | Q | 0.035 | [6.2e-10,0.26] |
| 3078 | M | 0.018 | [6.2e-10,0.26] |
| 3079 | E | 0.023 | [6.2e-10,0.26] |
| 3080 | K | 0.21 | [0.013,1] |
| 3081 | G | 0.024 | [6.2e-10,0.26] |
| 3082 | H | 0.03 | [6.2e-10,0.26] |
| 3083 | R | 0.025 | [6.2e-10,0.26] |
| 3084 | A | 0.24 | [0.013,1] |
| 3085 | L | 0.035 | [6.2e-10,0.26] |
| 3086 | A | 0.024 | [6.2e-10,0.26] |
| 3087 | L | 0.035 | [6.2e-10,0.26] |
| 3088 | A | 0.026 | [6.2e-10,0.26] |
| 3089 | 1 | 0.22 | [0.013,1] |
| 3090 | 1 | 0.026 | [6.2e-10,0.26] |
| 3091 | K | 0.024 | [6.2e-10,0.26] |
| 3092 | Y | 0.032 | [6.2e-10,0.26] |
| 3093 | T | 0.026 | [6.2e-10,0.26] |
| 3094 | Y | 0.033 | [6.2e-10,0.26] |
| 3095 | Q | 0.29 | [0.013,1] |
| 3096 | N | 0.024 | [6.2e-10,0.26] |
| 3097 | K | 0.025 | [6.2e-10,0.26] |
| 3098 | V | 0.023 | [6.2e-10,0.26] |
| 3099 | V | 0.024 | [6.2e-10,0.26] |
| 3100 | K | 0.023 | [6.2e-10,0.26] |
| 3101 | V | 0.026 | [6.2e-10,0.26] |


| 3102 | L | 0.033 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 3103 | R | 0.026 | [6.2e-10,0.26] |
| 3104 | P | 0.032 | [6.2e-10,0.26] |
| 3105 | A | 0.029 | [6.2e-10,0.26] |
| 3106 | E | 0.024 | [6.2e-10,0.26] |
| 3107 | R | 0.4 | [0.054,1] |
| 3108 | G | 0.024 | [6.2e-10,0.26] |
| 3109 | K | 0.024 | [6.2e-10,0.26] |
| 3110 | T | 0.026 | [6.2e-10,0.26] |
| 3111 | V | 0.028 | [6.2e-10,0.26] |
| 3112 | M | 0.018 | [6.2e-10,0.26] |
| 3113 | D | 0.023 | [6.2e-10,0.26] |
| 3114 | I | 0.025 | [6.2e-10,0.26] |
| 3115 | 1 | 0.026 | [6.2e-10,0.26] |
| 3116 | S | 0.035 | [6.2e-10,0.26] |
| 3117 | R | 0.026 | [6.2e-10,0.26] |
| 3118 | Q | 0.035 | [6.2e-10,0.26] |
| 3119 | D | 0.023 | [6.2e-10,0.26] |
| 3120 | Q | 0.034 | [6.2e-10,0.26] |
| 3121 | R | 0.025 | [6.2e-10,0.26] |
| 3122 | G | 0.024 | [6.2e-10,0.26] |
| 3123 | S | 0.026 | [6.2e-10,0.26] |
| 3124 | G | 0.026 | [6.2e-10,0.26] |
| 3125 | Q | 0.035 | [6.2e-10,0.26] |
| 3126 | V | 0.029 | [6.2e-10,0.26] |
| 3127 | V | 0.027 | [6.2e-10,0.26] |
| 3128 | T | 0.03 | [6.2e-10,0.26] |
| 3129 | Y | 0.035 | [6.2e-10,0.26] |
| 3130 | A | 0.029 | [6.2e-10,0.26] |
| 3131 | L | 0.033 | [6.2e-10,0.26] |
| 3132 | N | 0.024 | [6.2e-10,0.26] |
| 3133 | T | 0.026 | [6.2e-10,0.26] |
| 3134 | F | 0.03 | [6.2e-10,0.26] |
| 3135 | T | 0.026 | [6.2e-10,0.26] |
| 3136 | N | 0.024 | [6.2e-10,0.26] |
| 3137 | L | 0.035 | [6.2e-10,0.26] |
| 3138 | V | 0.023 | [6.2e-10,0.26] |
| 3139 | V | 0.023 | [6.2e-10,0.26] |
| 3140 | Q | 0.033 | [6.2e-10,0.26] |
| 3141 | L | 0.034 | [6.2e-10,0.26] |
| 3142 | 1 | 0.025 | [6.2e-10,0.26] |
| 3143 | R | 0.033 | [6.2e-10,0.26] |
| 3144 | N | 0.024 | [6.2e-10,0.26] |
| 3145 | M | 0.018 | [6.2e-10,0.26] |
| 3146 | E | 0.022 | [6.2e-10,0.26] |
| 3147 | A | 0.029 | [6.2e-10,0.26] |
| 3148 | E | 0.022 | [6.2e-10,0.26] |


| 3149 | E | 0.024 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 3150 | V | 0.025 | [6.2e-10,0.26] |
| 3151 | L | 0.037 | [6.2e-10,0.26] |
| 3152 | E | 0.022 | [6.2e-10,0.26] |
| 3153 | M | 0.018 | [6.2e-10,0.26] |
| 3154 | Q | 0.29 | [0.013,1] |
| 3155 | D | 0.024 | [6.2e-10,0.26] |
| 3156 | L | 0.036 | [6.2e-10,0.26] |
| 3157 | W | 0.035 | [6.2e-10,0.26] |
| 3158 | L | 0.035 | [6.2e-10,0.26] |
| 3159 | L | 0.035 | [6.2e-10,0.26] |
| 3160 | R | 0.025 | [6.2e-10,0.26] |
| 3161 | R | 0.21 | [0.013,1] |
| 3162 | P | 0.51 | [0.054,1] |
| 3163 | E | 0.022 | [6.2e-10,0.26] |
| 3164 | K | 0.024 | [6.2e-10,0.26] |
| 3165 | V | 0.023 | [6.2e-10,0.26] |
| 3166 | T | 0.026 | [6.2e-10,0.26] |
| 3167 | S | 0.38 | [0.054,1] |
| 3168 | W | 0.035 | [6.2e-10,0.26] |
| 3169 | L | 0.035 | [6.2e-10,0.26] |
| 3170 | Q | 0.033 | [6.2e-10,0.26] |
| 3171 | S | 0.22 | [0.013,1] |
| 3172 | N | 0.025 | [6.2e-10,0.26] |
| 3173 | G | 0.027 | [6.2e-10,0.26] |
| 3174 | W | 0.035 | [6.2e-10,0.26] |
| 3175 | D | 0.024 | [6.2e-10,0.26] |
| 3176 | R | 0.22 | [0.013,1] |
| 3177 | L | 0.032 | [6.2e-10,0.26] |
| 3178 | K | 0.025 | [6.2e-10,0.26] |
| 3179 | R | 0.038 | [6.2e-10,0.26] |
| 3180 | M | 0.018 | [6.2e-10,0.26] |
| 3181 | A | 0.025 | [6.2e-10,0.26] |
| 3182 | V | 0.026 | [6.2e-10,0.26] |
| 3183 | S | 0.027 | [6.2e-10,0.26] |
| 3184 | G | 0.027 | [6.2e-10,0.26] |
| 3185 | D | 0.026 | [6.2e-10,0.26] |
| 3186 | D | 0.024 | [6.2e-10,0.26] |
| 3187 | C | 0.032 | [6.2e-10,0.26] |
| 3188 | V | 0.029 | [6.2e-10,0.26] |
| 3189 | V | 0.024 | [6.2e-10,0.26] |
| 3190 | K | 0.023 | [6.2e-10,0.26] |
| 3191 | P | 0.032 | [6.2e-10,0.26] |
| 3192 | I | 0.027 | [6.2e-10,0.26] |
| 3193 | D | 0.026 | [6.2e-10,0.26] |
| 3194 | D | 0.026 | [6.2e-10,0.26] |
| 3195 | R | 0.023 | [6.2e-10,0.26] |


| 3196 | F | 0.033 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 3197 | A | 0.025 | [6.2e-10,0.26] |
| 3198 | H | 0.5 | [0.054,1] |
| 3199 | A | 0.39 | [0.054,1] |
| 3200 | L | 0.032 | [6.2e-10,0.26] |
| 3201 | R | 0.023 | [6.2e-10,0.26] |
| 3202 | F | 0.03 | [6.2e-10,0.26] |
| 3203 | L | 0.035 | [6.2e-10,0.26] |
| 3204 | N | 0.026 | [6.2e-10,0.26] |
| 3205 | D | 0.024 | [6.2e-10,0.26] |
| 3206 | M | 0.018 | [6.2e-10,0.26] |
| 3207 | G | 0.026 | [6.2e-10,0.26] |
| 3208 | K | 0.024 | [6.2e-10,0.26] |
| 3209 | V | 0.029 | [6.2e-10,0.26] |
| 3210 | R | 0.023 | [6.2e-10,0.26] |
| 3211 | K | 0.024 | [6.2e-10,0.26] |
| 3212 | D | 0.023 | [6.2e-10,0.26] |
| 3213 | T | 0.026 | [6.2e-10,0.26] |
| 3214 | Q | 0.034 | [6.2e-10,0.26] |
| 3215 | E | 0.023 | [6.2e-10,0.26] |
| 3216 | W | 0.035 | [6.2e-10,0.26] |
| 3217 | K | 0.025 | [6.2e-10,0.26] |
| 3218 | P | 0.033 | [6.2e-10,0.26] |
| 3219 | S | 0.033 | [6.2e-10,0.26] |
| 3220 | T | 0.03 | [6.2e-10,0.26] |
| 3221 | G | 0.027 | [6.2e-10,0.26] |
| 3222 | W | 0.035 | [6.2e-10,0.26] |
| 3223 | S | 0.37 | [0.054,1] |
| 3224 | N | 0.025 | [6.2e-10,0.26] |
| 3225 | W | 0.035 | [6.2e-10,0.26] |
| 3226 | E | 0.024 | [6.2e-10,0.26] |
| 3227 | E | 0.024 | [6.2e-10,0.26] |
| 3228 | V | 0.027 | [6.2e-10,0.26] |
| 3229 | P | 0.031 | [6.2e-10,0.26] |
| 3230 | F | 0.031 | [6.2e-10,0.26] |
| 3231 | C | 0.033 | [6.2e-10,0.26] |
| 3232 | S | 0.033 | [6.2e-10,0.26] |
| 3233 | H | 0.03 | [6.2e-10,0.26] |
| 3234 | H | 0.03 | [6.2e-10,0.26] |
| 3235 | F | 0.03 | [6.2e-10,0.26] |
| 3236 | N | 0.024 | [6.2e-10,0.26] |
| 3237 | K | 0.023 | [6.2e-10,0.26] |
| 3238 | L | 0.034 | [6.2e-10,0.26] |
| 3239 | Y | 0.5 | [0.054,1] |
| 3240 | L | 0.032 | [6.2e-10,0.26] |
| 3241 | K | 0.023 | [6.2e-10,0.26] |
| 3242 | D | 0.024 | [6.2e-10,0.26] |


| 3243 | G | 0.025 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 3244 | R | 0.025 | [6.2e-10,0.26] |
| 3245 | S | 0.033 | [6.2e-10,0.26] |
| 3246 | 1 | 0.027 | [6.2e-10,0.26] |
| 3247 | V | 0.023 | [6.2e-10,0.26] |
| 3248 | V | 0.026 | [6.2e-10,0.26] |
| 3249 | P | 0.034 | [6.2e-10,0.26] |
| 3250 | C | 0.032 | [6.2e-10,0.26] |
| 3251 | R | 0.033 | [6.2e-10,0.26] |
| 3252 | H | 0.03 | [6.2e-10,0.26] |
| 3253 | Q | 0.035 | [6.2e-10,0.26] |
| 3254 | D | 0.026 | [6.2e-10,0.26] |
| 3255 | E | 0.024 | [6.2e-10,0.26] |
| 3256 | L | 0.035 | [6.2e-10,0.26] |
| 3257 | 1 | 0.027 | [6.2e-10,0.26] |
| 3258 | G | 0.026 | [6.2e-10,0.26] |
| 3259 | R | 0.039 | [6.2e-10,0.26] |
| 3260 | A | 0.026 | [6.2e-10,0.26] |
| 3261 | R | 0.035 | [6.2e-10,0.26] |
| 3262 | V | 0.026 | [6.2e-10,0.26] |
| 3263 | S | 0.035 | [6.2e-10,0.26] |
| 3264 | P | 0.032 | [6.2e-10,0.26] |
| 3265 | G | 0.024 | [6.2e-10,0.26] |
| 3266 | A | 0.025 | [6.2e-10,0.26] |
| 3267 | G | 0.027 | [6.2e-10,0.26] |
| 3268 | W | 0.035 | [6.2e-10,0.26] |
| 3269 | S | 0.024 | [6.2e-10,0.26] |
| 3270 | 1 | 0.024 | [6.2e-10,0.26] |
| 3271 | R | 0.033 | [6.2e-10,0.26] |
| 3272 | E | 0.022 | [6.2e-10,0.26] |
| 3273 | T | 0.03 | [6.2e-10,0.26] |
| 3274 | A | 0.027 | [6.2e-10,0.26] |
| 3275 | C | 0.034 | [6.2e-10,0.26] |
| 3276 | L | 0.036 | [6.2e-10,0.26] |
| 3277 | A | 0.025 | [6.2e-10,0.26] |
| 3278 | K | 0.025 | [6.2e-10,0.26] |
| 3279 | S | 0.035 | [6.2e-10,0.26] |
| 3280 | Y | 0.036 | [6.2e-10,0.26] |
| 3281 | A | 0.025 | [6.2e-10,0.26] |
| 3282 | Q | 0.034 | [6.2e-10,0.26] |
| 3283 | M | 0.018 | [6.2e-10,0.26] |
| 3284 | W | 0.035 | [6.2e-10,0.26] |
| 3285 | Q | 0.033 | [6.2e-10,0.26] |
| 3286 | L | 0.034 | [6.2e-10,0.26] |
| 3287 | L | 0.035 | [6.2e-10,0.26] |
| 3288 | Y | 0.035 | [6.2e-10,0.26] |
| 3289 | F | 0.03 | [6.2e-10,0.26] |


| 3290 | H | 0.03 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 3291 | R | 0.22 | [0.013,1] |
| 3292 | R | 0.025 | [6.2e-10,0.26] |
| 3293 | D | 0.023 | [6.2e-10,0.26] |
| 3294 | L | 0.033 | [6.2e-10,0.26] |
| 3295 | R | 0.04 | [6.2e-10,0.26] |
| 3296 | L | 0.035 | [6.2e-10,0.26] |
| 3297 | M | 0.018 | [6.2e-10,0.26] |
| 3298 | A | 0.026 | [6.2e-10,0.26] |
| 3299 | N | 0.026 | [6.2e-10,0.26] |
| 3300 | A | 0.026 | [6.2e-10,0.26] |
| 3301 | 1 | 0.027 | [6.2e-10,0.26] |
| 3302 | C | 0.035 | [6.2e-10,0.26] |
| 3303 | S | 0.033 | [6.2e-10,0.26] |
| 3304 | S | 0.27 | [0.013,1] |
| 3305 | V | 0.024 | [6.2e-10,0.26] |
| 3306 | P | 0.032 | [6.2e-10,0.26] |
| 3307 | V | 0.24 | [0.013,1] |
| 3308 | D | 0.023 | [6.2e-10,0.26] |
| 3309 | W | 0.035 | [6.2e-10,0.26] |
| 3310 | V | 0.027 | [6.2e-10,0.26] |
| 3311 | P | 0.032 | [6.2e-10,0.26] |
| 3312 | T | 0.029 | [6.2e-10,0.26] |
| 3313 | G | 0.024 | [6.2e-10,0.26] |
| 3314 | R | 0.026 | [6.2e-10,0.26] |
| 3315 | T | 0.027 | [6.2e-10,0.26] |
| 3316 | T | 0.026 | [6.2e-10,0.26] |
| 3317 | W | 0.035 | [6.2e-10,0.26] |
| 3318 | S | 0.035 | [6.2e-10,0.26] |
| 3319 | 1 | 0.024 | [6.2e-10,0.26] |
| 3320 | H | 0.033 | [6.2e-10,0.26] |
| 3321 | G | 0.026 | [6.2e-10,0.26] |
| 3322 | K | 0.023 | [6.2e-10,0.26] |
| 3323 | G | 0.027 | [6.2e-10,0.26] |
| 3324 | E | 0.024 | [6.2e-10,0.26] |
| 3325 | W | 0.035 | [6.2e-10,0.26] |
| 3326 | M | 0.018 | [6.2e-10,0.26] |
| 3327 | T | 0.027 | [6.2e-10,0.26] |
| 3328 | T | 0.25 | [0.013,1] |
| 3329 | E | 0.023 | [6.2e-10,0.26] |
| 3330 | D | 0.023 | [6.2e-10,0.26] |
| 3331 | M | 0.018 | [6.2e-10,0.26] |
| 3332 | L | 0.033 | [6.2e-10,0.26] |
| 3333 | V | 0.18 | [0.013,0.26] |
| 3334 | V | 0.023 | [6.2e-10,0.26] |
| 3335 | W | 0.035 | [6.2e-10,0.26] |
| 3336 | N | 0.025 | [6.2e-10,0.26] |


| 3337 | R | 0.026 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 3338 | V | 0.023 | [6.2e-10,0.26] |
| 3339 | W | 0.035 | [6.2e-10,0.26] |
| 3340 | 1 | 0.027 | [6.2e-10,0.26] |
| 3341 | E | 0.022 | [6.2e-10,0.26] |
| 3342 | E | 0.022 | [6.2e-10,0.26] |
| 3343 | N | 0.024 | [6.2e-10,0.26] |
| 3344 | D | 0.023 | [6.2e-10,0.26] |
| 3345 | H | 0.031 | [6.2e-10,0.26] |
| 3346 | M | 0.018 | [6.2e-10,0.26] |
| 3347 | E | 0.2 | [0.013,0.26] |
| 3348 | D | 0.023 | [6.2e-10,0.26] |
| 3349 | K | 0.023 | [6.2e-10,0.26] |
| 3350 | T | 0.027 | [6.2e-10,0.26] |
| 3351 | P | 0.035 | [6.2e-10,0.26] |
| 3352 | V | 0.026 | [6.2e-10,0.26] |
| 3353 | T | 0.38 | [0.054,1] |
| 3354 | K | 0.024 | [6.2e-10,0.26] |
| 3355 | W | 0.035 | [6.2e-10,0.26] |
| 3356 | T | 0.026 | [6.2e-10,0.26] |
| 3357 | D | 0.2 | [0.013,0.26] |
| 3358 | I | 0.027 | [6.2e-10,0.26] |
| 3359 | P | 0.033 | [6.2e-10,0.26] |
| 3360 | Y | 0.036 | [6.2e-10,0.26] |
| 3361 | L | 0.035 | [6.2e-10,0.26] |
| 3362 | G | 0.026 | [6.2e-10,0.26] |
| 3363 | K | 0.025 | [6.2e-10,0.26] |
| 3364 | R | 0.023 | [6.2e-10,0.26] |
| 3365 | E | 0.023 | [6.2e-10,0.26] |
| 3366 | D | 0.35 | [0.054,1] |
| 3367 | L | 0.037 | [6.2e-10,0.26] |
| 3368 | W | 0.035 | [6.2e-10,0.26] |
| 3369 | C | 0.035 | [6.2e-10,0.26] |
| 3370 | G | 0.026 | [6.2e-10,0.26] |
| 3371 | S | 0.28 | [0.013,1] |
| 3372 | L | 0.29 | [0.013,1] |
| 3373 | 1 | 0.02 | [6.2e-10,0.26] |
| 3374 | G | 0.024 | [6.2e-10,0.26] |
| 3375 | H | 0.03 | [6.2e-10,0.26] |
| 3376 | R | 0.026 | [6.2e-10,0.26] |
| 3377 | P | 0.033 | [6.2e-10,0.26] |
| 3378 | R | 0.033 | [6.2e-10,0.26] |
| 3379 | T | 0.027 | [6.2e-10,0.26] |
| 3380 | T | 0.029 | [6.2e-10,0.26] |
| 3381 | W | 0.035 | [6.2e-10,0.26] |
| 3382 | A | 0.029 | [6.2e-10,0.26] |
| 3383 | E | 0.022 | [6.2e-10,0.26] |


| 3384 | N | 0.024 | [6.2e-10,0.26] |
| :---: | :---: | :---: | :---: |
| 3385 | 1 | 0.025 | [6.2e-10,0.26] |
| 3386 | K | 0.025 | [6.2e-10,0.26] |
| 3387 | D | 0.21 | [0.013,1] |
| 3388 | T | 0.026 | [6.2e-10,0.26] |
| 3389 | V | 0.025 | [6.2e-10,0.26] |
| 3390 | N | 0.024 | [6.2e-10,0.26] |
| 3391 | M | 0.018 | [6.2e-10,0.26] |
| 3392 | V | 0.35 | [0.054,1] |
| 3393 | R | 0.28 | [0.013,1] |
| 3394 | R | 0.023 | [6.2e-10,0.26] |
| 3395 | I | 0.21 | [0.013,1] |
| 3396 | 1 | 0.02 | [6.2e-10,0.26] |
| 3397 | G | 0.03 | [6.2e-10,0.26] |
| 3398 | D | 0.026 | [6.2e-10,0.26] |
| 3399 | E | 0.024 | [6.2e-10,0.26] |
| 3400 | E | 0.024 | [6.2e-10,0.26] |
| 3401 | K | 0.21 | [0.013,1] |
| 3402 | Y | 0.033 | [6.2e-10,0.26] |
| 3403 | M | 0.17 | [0.013,0.26] |
| 3404 | D | 0.023 | [6.2e-10,0.26] |
| 3405 | Y | 0.033 | [6.2e-10,0.26] |
| 3406 | L | 0.037 | [6.2e-10,0.26] |
| 3407 | S | 0.033 | [6.2e-10,0.26] |
| 3408 | T | 0.026 | [6.2e-10,0.26] |
| 3409 | Q | 0.035 | [6.2e-10,0.26] |
| 3410 | V | 0.027 | [6.2e-10,0.26] |
| 3411 | R | 0.033 | [6.2e-10,0.26] |
| 3412 | Y | 0.032 | [6.2e-10,0.26] |
| 3413 | L | 0.035 | [6.2e-10,0.26] |
| 3414 | G | 0.029 | [6.2e-10,0.26] |
| 3415 | E | 0.023 | [6.2e-10,0.26] |
| 3416 | E | 0.024 | [6.2e-10,0.26] |
| 3417 | G | 0.024 | [6.2e-10,0.26] |
| 3418 | S | 0.033 | [6.2e-10,0.26] |
| 3419 | T | 0.026 | [6.2e-10,0.26] |
| 3420 | P | 0.036 | [6.2e-10,0.26] |
| 3421 | G | 0.027 | [6.2e-10,0.26] |
| 3422 | V | 0.024 | [6.2e-10,0.26] |
| 3423 | L | 0.035 | [6.2e-10,0.26] |

