

**Supplementary Table 1.** Oligonucleotides used to generate the forward (fwd1 to fwd17) and reverse (rev1 to rev17) chains of the synthetic gene.

<b>fwd 1</b>	5'-GGTGGTCATATGTCCATGATGTCTCGTATCGCGGCGGGTGAC-3'	<b>rev 1</b>	5'-GGTGGTTGCTCTTCCGCAGCCCTGTTCTTTGA-3'
<b>fwd 2</b>	5'-CTGGAATCTTCTGTTGACGACCCGCGTTCTGAAGAAGACA-3'	<b>rev 2</b>	5'-TTCCTGAACACCAGACAGACCCAGCATACGGTCCGC-3'
<b>fwd 3</b>	5'-AACGTTTCGAATCTCACATCGAATGCCGTAAACCGTACAAA-3'	<b>rev 3</b>	5'-CAGGTTGATTTTTTTCGGGTTTCAGCCAGTGCAGCAGGA-3'
<b>fwd 4</b>	5'-GAACTGCGTCTGGAAGTTGGTAAACAGCGTCTGAAATACGCG-3'	<b>rev 4</b>	5'-AGCACAGGTCGGTTTCAGACATGTTTCGGGAAGTCTTTAGAGTT-3'
<b>fwd 5</b>	5'-CAGGAAGAACTGTCTAACGAAGTTCTGCCGCCGCC-3'	<b>rev 5</b>	5'-CGCCCGGATTTCTTCCAGGTCCAGCATGCCGTGCG-3'
<b>fwd 6</b>	5'-GCGTAAAATGAAAGGTCTGTTCTCTCAGGCGAAAATCTCCCTG-3'	<b>rev 6</b>	5'-GGAAGTAACTTTGCTCCAGTATTTGTTGCTGGTGAATTTTTCGATC-3'
<b>fwd 7</b>	5'-TTTTACACCGAAGAACACGAAATTATGAAATTCTTTGGCGT-3'	<b>rev 7</b>	5'-AGAGAAACGATTTTGTCTCTTTCATTTTCGGTCCATTTTTTCAT-3'
<b>fwd 8</b>	5'-GGTGTTACCGCGGACACCCGTGCGCTGCGTCG-3'	<b>rev 8</b>	5'-CGTTCAGACGGATCAGACACCGGTCAGAACACCCG-3'
<b>fwd 9</b>	5'-TTTCGGTTTCTCTCTGGCGGCGGGTCTGTTCTGTTTG-3'	<b>rev 9</b>	5'-CGTCCATTTCCAGGGTCCAAACAGAACGACCCGC-3'
<b>fwd 10</b>	5'-GACCCTGGAAATGGACGCGGGTGTCTGACCGG-3'	<b>rev 10</b>	5'-CGCCAGAGAGAAACCGAAACGACGCAGCGCACG-3'
<b>fwd 11</b>	5'-TCGTCTGATCCGTCTGAACGATGAAAAATGGACCGAAAT-3'	<b>rev 11</b>	5'-GGTGTCGCGGTAACACCACGCCAAGAGAATTTTCATAA-3'
<b>fwd 12</b>	5'-GAAAGACGACAAAATCGTTTCTCTGATCGAAAAATTCACCAGCA-3'	<b>rev 12</b>	5'-TTTCGTGTTCTTCGGTGTAACAGGGAGATTTTCGCCTGAGAG-3'
<b>fwd 13</b>	5'-ACAAATACTGGAGCAAAGTTAAC TTCCCGCACGGCATGCTGGACCTG-3'	<b>rev 13</b>	5'-AACAGACCTTTCATTTTACGCGGCGGCGGCAGA-3'
<b>fwd 14</b>	5'-GAAGAAATCGCGGCGAACTCTAAAGACTTCCCGAACAT-3'	<b>rev 14</b>	5'-ACTTCGTTAGACAGTTCTTCTGCGGTATTTTCAGACGCTGTTTA-3'
<b>fwd 15</b>	5'-GTCTGAAACCGACCTGTGCTTCTGCTGCACTGGCTGAA-3'	<b>rev 15</b>	5'-CCAACCTCCAGACGCAGTTCTTTGTACGGTTTACGGCATT-3'
<b>fwd 16</b>	5'-CCCGAAAAAATCAACCTGGCGGACCGTATGCTGG-3'	<b>rev 16</b>	5'-CGATGTGAGATTCGAAACGTTTGTCTTCTCAGAACGCGG-3'
<b>fwd 17</b>	5'-GTCTGTCTGGTGTTTCAGGAAATCAAAGAACAGGGCTGCGG-3'	<b>rev 17</b>	5'-GTCGTCAACAGAAGATTCAGGTACCCGCCGCGAT-3'