**Table S4. Alignment of the 646 bp amplicon amplified from fibroblasts grown in 2%O2 and FGF2 (CRL2352 treated) – colony 1, 3, 4, 5, 6 and 7 – aligned to Oct4A mRNA sequence from GenBank (NM\_002701.4).**

gi|Oct4A|ref|NM\_002701.4| GGCACTGCAGGAACAAATTCTCCAGGTTGCCTCTCACTCGGTTCTCGATA 650

gi|Oct4A|646bp ------------------------GGTTGCCTCTCACTCGGTTCTCGATA 26

5\_CRL2352\_treated\_1 ------------------------GGTTGCCTCTCACTCGGTTCTCGATA 26

7\_CRL2352\_treated\_4 ------------------------GGTTGCCTCTCACTCGGTTCTCGATA 26

10\_CRL2352\_treated\_7 ------------------------GGTTGCCTCTCACTCGGTTCTCGATA 26

33\_CRL2352\_treated\_3 ------------------------GGTTGCCTCTCACTCGGTTCTCGATA 26

35\_CRL2352\_treated\_5 ------------------------GGTTGCCTCTCACTCGGTTCTCGATA 26

36\_CRL2352\_treated\_6 ------------------------GGTTGCCTCTCACTCGGTTCTCGATA 26

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gi|Oct4A|ref|NM\_002701.4| CTGGTTCGCTTTCTCTTTCGGGCCTGCACGAGGGTTTCTGCTTTGCATAT 700

gi|Oct4A|646bp CTGGTTCGCTTTCTCTTTCGGGCCTGCACGAGGGTTTCTGCTTTGCATAT 76

5\_CRL2352\_treated\_1 CTGGTTCGCTTTCTCTTTCGGGCCTGCACGAGGGTTTCTGCTTTGCATAT 76

7\_CRL2352\_treated\_4 CTGGTTCGCTTTCTCTTTCGGGCCTGCACGAGGGTTTCTGCTTTGCATAT 76

10\_CRL2352\_treated\_7 CTGGTTCGCTTTCTCTTTCGGGCCTGCACGAGGGTTTCTGCTTTGCATAT 76

33\_CRL2352\_treated\_3 CTGGTTCGCTCTCTCTTTCGGGCCTGCACGAGGGTTTCTGCTTTGCATAT 76

35\_CRL2352\_treated\_5 CTGGTTCGCTTTCTCTTTCGGGCCTGCACGAGGGTTTCTGCTTTGCATAT 76

36\_CRL2352\_treated\_6 CTGGTTCGCTTTCTCTTTCGGGCCTGCACGAGGGTTTCTGCTTTGCATAT 76

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gi|Oct4A|ref|NM\_002701.4| CTCCTGAAGATTTTCATTGTTGTCAGCTTCCTCCACCCACTTCTGCAGCA 750

gi|Oct4A|646bp CTCCTGAAGATTTTCATTGTTGTCAGCTTCCTCCACCCACTTCTGCAGCA 126

5\_CRL2352\_treated\_1 CTCCTGAAGATTTTCATTGTTGTCAGCTTCCTCCACCCACTTCTGCAGCA 126

7\_CRL2352\_treated\_4 CTCCTGAAGATTTTCATTGTTGTCAGCTTCCTCCACCCACTTCTGCAGCA 126

10\_CRL2352\_treated\_7 CTCCTGAAGATTTTCATTGTTGTCAGCTTCCTCCACCCACTTCTGCAGCA 126

33\_CRL2352\_treated\_3 CTCCTGAAGATTTTCATTGTTGTCAGCTTCCTCCACCCACTTCTGCAGCA 126

35\_CRL2352\_treated\_5 CTCCTGAAGATTTTCATTGTTGTCAGCTTCCTCCACCCACTTCTGCAGCA 126

36\_CRL2352\_treated\_6 CTCCTGAAGATTTTCATTGTTGTCAGCTTCCTCCACCCACTTCTGCAGCA 126

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gi|Oct4A|ref|NM\_002701.4| AGGGCCGCAGCTTACACATGTTCTTGAAGCTAAGCTGCAGAGCCTCAAAG 800

gi|Oct4A|646bp AGGGCCGCAGCTTACACATGTTCTTGAAGCTAAGCTGCAGAGCCTCAAAG 176

5\_CRL2352\_treated\_1 AGGGCCGCAGCTTACACATGTTCTTGAAGCTAAGCTGCAGAGCCTCAAAG 176

7\_CRL2352\_treated\_4 AGGGCCGCAGCTTACACATGTTCTTGAAGCTAAGCTGCAGAGCCTCAAAG 176

10\_CRL2352\_treated\_7 AGGGCCGCAGCTTACACATGTTCTTGAAGCTAAGCTGCAGAGCCTCAAAG 176

33\_CRL2352\_treated\_3 AGGGCCGCAGCTTACACATGTTCTTGAAGCTAAGCTGCAGAGCCTCAAAG 176

35\_CRL2352\_treated\_5 AGGGCCGCAGCTTACACATGTTCTTGAAGCTAAGCTGCAGAGCCTCAAAG 176

36\_CRL2352\_treated\_6 AGGGCCGCAGCTTACACATGTTCTTGAAGCTAAGCTGCAGAGCCTCAAAG 176

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gi|Oct4A|ref|NM\_002701.4| CGGCAGATGGTCGTTTGGCTGAATACCTTCCCAAATAGAACCCCCAGGGT 850

gi|Oct4A|646bp CGGCAGATGGTCGTTTGGCTGAATACCTTCCCAAATAGAACCCCCAGGGT 226

5\_CRL2352\_treated\_1 CGGCAGATGGTCGTTTGGCTGAATACCTTCCCAAATAGAACCCCCAGGGT 226

7\_CRL2352\_treated\_4 CGGCAGATGGTCGTTTGGCTGAATACCTTCCCAAATAGAACCCCCAGGGT 226

10\_CRL2352\_treated\_7 CGGCAGATGGTCGTTTGGCTGAATACCTTCCCAAATAGAACCCCCAGGGT 226

33\_CRL2352\_treated\_3 CGGCAGATGGTCGTTTGGCTGAATACCTTCCCAAATAGAACCCCCAGGGT 226

35\_CRL2352\_treated\_5 CGGCAGATGGTCGTTTGGCTGAATACCTTCCCAAATAAAACCCCCAGGGT 226

36\_CRL2352\_treated\_6 CGGCAGATGGTCGTTTGGCTGAATACCTTCCCAAATAGAACCCCCAGGGT 226

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gi|Oct4A|ref|NM\_002701.4| GAGCCCCACATCGGCCTGTGTATATCCCAGGGTGATCCTCTTCTGCTTCA 900

gi|Oct4A|646bp GAGCCCCACATCGGCCTGTGTATATCCCAGGGTGATCCTCTTCTGCTTCA 276

5\_CRL2352\_treated\_1 GAGCCCCACATCGGCCTGTGTATATCCCAGGGTGATCCTCTTCTGCTTCA 276

7\_CRL2352\_treated\_4 GAGCCCCACATCGGCCTGTGTATATCCCAGGGTGATCCTCTTCTGCTTCA 276

10\_CRL2352\_treated\_7 GAGCCCCACATCGGCCTGTGTATATCCCAGGGTGATCCTCTTCTGCTTCA 276

33\_CRL2352\_treated\_3 GAGCCTCACATCGGCCTGTGTATATCCCAGGGTGATCCTCTTCTGCTTCA 276

35\_CRL2352\_treated\_5 GAGCCCCACATCGGCCTGTGTATATCCCAGGGTGATCCTCTTCTGCTTCA 276

36\_CRL2352\_treated\_6 GAGCCCCACATCGGCCTGTGTATATCCCAGGGTGATCCTCTTCTGCTTCA 276

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gi|Oct4A|ref|NM\_002701.4| GGAGCTTGGCAAATTGCTCGAGTTCTTTCTGCAGAGCTTTGATGTCCTGG 950

gi|Oct4A|646bp GGAGCTTGGCAAATTGCTCGAGTTCTTTCTGCAGAGCTTTGATGTCCTGG 326

5\_CRL2352\_treated\_1 GGAGCTTGGCAAATTGCTCGAGTTCTTTCTGCAGAGCTTTGATGTCCTGG 326

7\_CRL2352\_treated\_4 GGAGCTTGGCAAATTGCTCGAGTTCTTTCTGCAGAGCTTTGATGTCCTGG 326

10\_CRL2352\_treated\_7 GGAGCTTGGCAAATTGCTCGAGTTCTTTCTGCAGAGCTTTGATGTCCTGG 326

33\_CRL2352\_treated\_3 GGAGCTTGGCAAATTGCTCGAGTTCTTTCTGCAGAGCTTTGATGTCCTGG 326

35\_CRL2352\_treated\_5 GGAGCTTGGCAAATTGCTCGAGTTCTTTCTGCAGAGCTTTGATGTCCTGG 326

36\_CRL2352\_treated\_6 GGAGCTTGGCAAATTGCTCGAGTTCTTTCTGCAGAGCTTTGATGTCCTGG 326

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gi|Oct4A|ref|NM\_002701.4| GACTCCTCCGGGTTTTGCTCCAGCTTCTCCTTCTCCAGCTTCACGGCACC 1000

gi|Oct4A|646bp GACTCCTCCGGGTTTTGCTCCAGCTTCTCCTTCTCCAGCTTCACGGCACC 376

5\_CRL2352\_treated\_1 GACTCCTCCGGGTTTTGCTCCAGCTTCTCCTTCTCCAGCTTCACGGCACC 376

7\_CRL2352\_treated\_4 GACTCCTCCGGGTTTTGCTCCAGCTTCTCCTTCTCCAGCTTCACGGCACC 376

10\_CRL2352\_treated\_7 GACTCCTCCGGGTTTTGCTCCAGCTTCTCCTTCTCCAGCTTCACGGCACC 376

33\_CRL2352\_treated\_3 GACTCCTCCGGGTTTTGCTCCAGCTTCTCCTTCTCCAGCTTCACGGCACC 376

35\_CRL2352\_treated\_5 GACTCCTCCGGGTTTTGCTCCAGCTTCTCCTTCTCCAGCTTCACGGCACC 376

36\_CRL2352\_treated\_6 GACTCCTCCGGGTTTTGCTCCAGCTTCTCCTTCTCCAGCTTCACGGCACC 376

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gi|Oct4A|ref|NM\_002701.4| AGGGGTGACGGTGCAGGGCTCCGGGGAGGCCCCATCGGAGTTGCTCTCCA 1050

gi|Oct4A|646bp AGGGGTGACGGTGCAGGGCTCCGGGGAGGCCCCATCGGAGTTGCTCTCCA 426

5\_CRL2352\_treated\_1 AGGGGTGACGGTGCAGGGCTCCGGGGAGGCCCCATCGGAGTTGCTCTCCA 426

7\_CRL2352\_treated\_4 AGGGGTGACGGTGCAGGGCTCCGGGGAGGCCCCATCGGAGTTGCTCTCCA 426

10\_CRL2352\_treated\_7 AGGGGTGACGGTGCAGGGCTCCGGGGAGGCCCCATCGGAGTTGCTCTCCA 426

33\_CRL2352\_treated\_3 AGGGGTGACGGTGCAGGGCTCCGGGGAGGCCCCATCGGAGTTGCTCTCCA 426

35\_CRL2352\_treated\_5 AGGGGTGACGGTGCAGGGCTCCGGGGAGGCCCCATCGGAGTTGCTCTCCA 426

36\_CRL2352\_treated\_6 AGGGGTGACGGTGCAGGGCTCCGGGGAGGCCCCATCGGAGTTGCTCTCCA 426

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gi|Oct4A|ref|NM\_002701.4| CCCCGACTCCTGCTTCGCCCTCAGGCTGAGAGGTCTCCAAGCCGCCTTGG 1100

gi|Oct4A|646bp CCCCGACTCCTGCTTCGCCCTCAGGCTGAGAGGTCTCCAAGCCGCCTTGG 476

5\_CRL2352\_treated\_1 CCCCGACTCCTGCTTCGCCCTCAGGCTGAGAGGTCTCCAAGCCGCCTTGG 476

7\_CRL2352\_treated\_4 CCCCGACTCCTGCTTCGCCCTCAGGCTGAGAGGTCTCCAAGCCGCCTTGG 476

10\_CRL2352\_treated\_7 CCCCGACTCCTGCTTCGCCCTCAGGCTGAGAGGTCTCCAAGCCGCCTTGG 476

33\_CRL2352\_treated\_3 CCCCGACTCCTGCTTCGCCCTCAGGCTGAGAGGTCTCCAAGCCGCCTTGG 476

35\_CRL2352\_treated\_5 CCCCGACTCCTGCTTCGCCCTCAGGCTGAGAGGTCTCCAAGCCGCCTTGG 476

36\_CRL2352\_treated\_6 CCCCGACTCCTGCTTCGCCCTCAGGCTGAGAGGTCTCCAAGCCGCCTTGG 476

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gi|Oct4A|ref|NM\_002701.4| GGCACTAGCCCCACTCCAACCTGGGGCCCACAGTACGCCATCCCCCCACA 1150

gi|Oct4A|646bp GGCACTAGCCCCACTCCAACCTGGGGCCCACAGTACGCCATCCCCCCACA 526

5\_CRL2352\_treated\_1 GGCACTAGCCCCACTCCAACCTGGGGCCCACAGTACGCCATCCCCCCACA 526

7\_CRL2352\_treated\_4 GGCACTAGCCCCACTCCAACCTGGGGCCCACAGTACGCCATCCCCCCACG 526

10\_CRL2352\_treated\_7 GGCACTAGCCCCACTCCAACCTGGGGCCCACAGTACGCCATCCCCCCACA 526

33\_CRL2352\_treated\_3 GGCACTAGCCCCACTCCAACCTGGGGCCCACAGTACGCCATCCCCCCACA 526

35\_CRL2352\_treated\_5 GGCACTAGCCCCACTCCAACCTGGGGCCCACAGTACGCCATCCCCCCACA 526

36\_CRL2352\_treated\_6 GGCACTAGCCCCACTCCAACCTGGGGCCCACAGTACGCCATCCCCCCACA 526

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gi|Oct4A|ref|NM\_002701.4| GAACTCATACGGCGGGGGGCATGGGGGAATCCCCCACACCTCAGAGCCTG 1200

gi|Oct4A|646bp GAACTCATACGGCGGGGGGCATGGGGGAATCCCCCACACCTCAGAGCCTG 576

5\_CRL2352\_treated\_1 GAACTCATACGGCGGGGGGCATGGGGGAATCCCCCACGCCTCAGAGCCTG 576

7\_CRL2352\_treated\_4 GAACTCATACGGCGGGGGGCATGGGGGAATCCCCCACACCTCAGAGCCTG 576

10\_CRL2352\_treated\_7 GAACTCATACGGCGGGGGGCATGGGGGAATCCCCCACACCTCAGAGCCTG 576

33\_CRL2352\_treated\_3 GAACTCATACGGCGGGGGGCATGGGGGAATCCCCCACACCTCAGAGCCTG 576

35\_CRL2352\_treated\_5 GAACTCATACGGCGGGGGGCATGGGGGAATCCCCCACACCTCAGAGCCTG 576

36\_CRL2352\_treated\_6 GAACTCATACGGCGGGGGGCATGGGGGAATCCCCCACACCTCAGAGCCTG 576

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gi|Oct4A|ref|NM\_002701.4| GCCCAACCCCCGGCCCGATTCCTGGCCCTCCAGGAGGGCCTTGGAAGCTT 1250

gi|Oct4A|646bp GCCCAACCCCCGGCCCGATTCCTGGCCCTCCAGGAGGGCCTTGGAAGCTT 626

5\_CRL2352\_treated\_1 GCCCAACCCCCGGCCCGATTCCTGGCCCTCCAGGAGGGCCTTGGAAGCTT 626

7\_CRL2352\_treated\_4 GCCCAACCCCCGGCCCGATTCCTGGCCCTCCAGGAGGGCCTTGGAAGCTT 626

10\_CRL2352\_treated\_7 GCCCAACCCCCGGCCCGATTCCTGGCCCTCCAGGAGGGCCTTGGAAGCTT 626

33\_CRL2352\_treated\_3 GCCCAACCCCCGGCCCGATTCCTGGCCCTCCAGGAGGGCCTTGGAAGCTT 626

35\_CRL2352\_treated\_5 GCCCAACCCCCGGCCCGATTCCTGGCCCTCCAGGAGGGCCTTGGAAGCTT 626

36\_CRL2352\_treated\_6 GCCCAACCCCCGGCCCGATTCCTGGCCCTCCAGGAGGGCCTTGGAAGCTT 626

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gi|Oct4A|ref|NM\_002701.4| AGCCAGGTCCGAGGATCAACCCAGCCCGGCTCCGGCCCCCCTGGCCCATC 1300

gi|Oct4A|646bp AGCCAGGTCCGAGGATCAAC------------------------------ 646

5\_CRL2352\_treated\_1 AGCCAGGTCCGAGGATCAAC------------------------------ 646

7\_CRL2352\_treated\_4 AGCCAGGTCCGAGGATCAAC------------------------------ 646

10\_CRL2352\_treated\_7 AGCCAGGTCCGAGGATCAAC------------------------------ 646

33\_CRL2352\_treated\_3 AGCCAGGTCCGAGGATCAAC------------------------------ 646

35\_CRL2352\_treated\_5 AGCCAGGTCCGAGGATCAAC------------------------------ 646

36\_CRL2352\_treated\_6 AGCCAGGTCCGAGGATCAAC------------------------------ 646

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