**Table S2: Primers used for 3C-qPCR**

| Chromosome | Start [hg19] | End [hg19] | 3C fragment | Sequence |
|---|---|---|---|---|
| chr7 | 113619659 | 113619682 | -107 | TTCTTTCAGTACCACTGCTAGGTG |
| chr7 | 113652257 | 113652276 | -74 | TTCTCTCCCCTCCCCATATC |
| chr7 | 113658218 | 113658234 | -68 | CCACATGGGAGGAGCAAG |
| chr7 | 113667023 | 113667041 | -59 | CCCCATTAAATGCTTGCAG |
| chr7 | 113686885 | 113686904 | -39 | GTTCCTTTTCTGGCAGGATG |
| chr7 | 113688356 | 113688375 | -38 | CAATGCCTTGGTCATTGTTG |
| chr7 | 113689702 | 113689721 | -37 | CACACTGATGGATGGCTCAC |
| chr7 | 113706877 | 113706896 | -19 | GCAAGCCAAAATTCCAAATC |
| chr7 | 113708164 | 113708186 | -18 | TTGCTCATAGACACAAATCAAGG |
| chr7 | 113710846 | 113710867 | -15 | AAAACCAGGAAACTGACATTGG |
| chr7 | 113715771 | 113715790 | -11 | GGGTCTGCTTCCAAGTTCAG |
| chr7 | 113721054 | 113721074 | -5 | TCTTGCATCAGGAAATTCCAC |
| chr7 | 113732140 | 113732161 | Anchor point | TGAAAAGCACATTGCTGTGAAG |
| chr7 | 113739754 | 113739773 | 13 | CTCCCTTGGACACCAGAATC |
| chr7 | 113743011 | 113743032 | 17 | TTGTTCAGTGCTTGACTTTTGG |
| chr7 | 113751593 | 113751615 | 25 | AAGGGAACTTATCCAGCTACAGG |
| chr7 | 113755630 | 113755649 | 29 | GCCAGGAATATTGGCTGTTG |
| chr7 | 113764551 | 113764570 | 38 | TCCAATGGTGCTCACAAAAG |
| chr7 | 113772692 | 113772711 | 46 | TAGATGGAATGGCCAGGAAG |
| chr7 | 113779379 | 113779407 | 53 | GTTGTTTTCGGGGAGGTTG |
| chr7 | 113796607 | 113796626 | 70 | CCACCTTTCAAGACCAGACC |
| chr7 | 113803849 | 113803870 | 78 | CTGGAATGTTACCTAGGGCATC |
| chr7 | 113815841 | 113815863 | 89 | CGATTCTCTTCCCTGTAGAATCC |
| chr7 | 113978968 | 113978990 | 253 | TTCCATGCTCTGGAGATTAAAAC |
| chr7 | 113988151 | 113988176 | 262 | GAGAATTACGTGGTAAATCACAGTTG |
| chr7 | 113998725 | 113998744 | 272 | AGAGACTGGAGGCATTTTGC |
| chr7 | 114034128 | 114034148 | 308 | TCCAAAAGCAATTAGCACACC |
| chr7 | 114055582 | 114055601 | 329 | GGGAGACCAGACACAGGAAC |
| chr7 | 114056404 | 114056423 | 330 | TTCCCAGTGACATGAGCAAG |
| chr7 | 114061389 | 114061413 | 335 | TTTCATTGGCTTTACTTATGTTTCC |
| chr7 | 114068822 | 114068845 | 342 | TGATGCAGTTATTGCCTTTAATTC |
| chr7 | 114072519 | 114072541 | 346 | AACTAAGGTTTTGCAGCTGACTG |
| chr7 | 114079808 | 114079827 | 353 | ATGTGGAGACAGGGTTTTGG |
| chr7 | 114329855 | 114329874 | 604 | GGAAGAGCCAGTGATTGCAG |
| chr7 | 114329855 | 114329874 | 621 | TTGGAAAGGGCTACAGTGACA |
| chr7 | 114329855 | 114329874 | 633 | CACCCATTTCCTCTTTTTCCA |
| chr7 | 114432476 | 114432495 | 706 | GAAGTTGACCCACCACTCCA |
| chr7 | 114463228 | 114463247 | 737 | TGGGCCTCTGTTGTCTCAGT |
| chr7 | 114478670 | 114478689 | 752 | GCAGAACAAGGGTGGACAAA |
| chr7 | 114498528 | 114498547 | 772 | AGCTTTTCTGGGGAGCTGAC |
| chr7 | 114535036 | 114535055 | 809 | TCCTTTAGCGCTGCTCTGAT |
| chr7 | 114549286 | 114549307 | 823 | CAAGCATTTGTCCTTTCTTTGA |
| chr7 | 114568978 | 114568997 | 843 | CAGCTGTGAGAACCCCTGAG |
| chr7 | 114590707 | 114590726 | 864 | CAGGGGAGGTAAAGGCTCAA |
| chr7 | 115112801 | 115112820 | 1386 | CACAAGGGCCCAAGTTACAA |
| chr7 | 115117519 | 115117538 | 1391 | GGAGATCCCGAGAAAAGCTC |