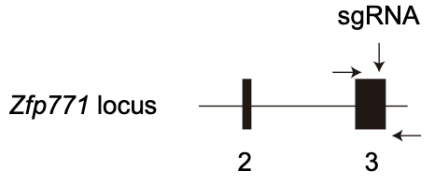
A



genome: 5'-catccgccaccgtcgcgcgcacatgcggcgccgcctctacatctgcgcgggctgcggccg-3'

Zfp771-KO-1: 5'-catccgccaccg- -ggctgcggccg-3' -37
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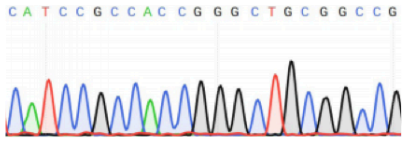
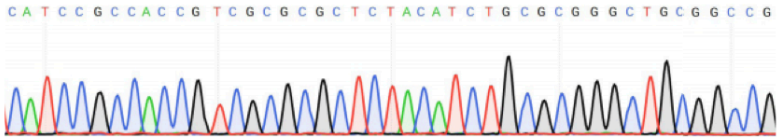
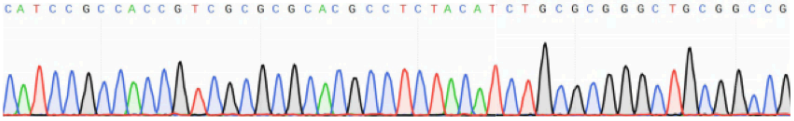
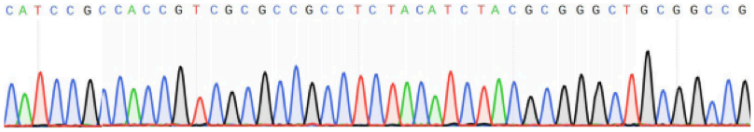




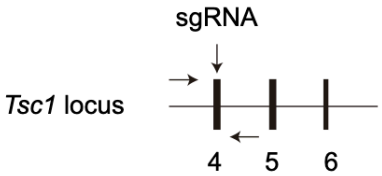
Zfp771-KO-2: 5'-catccgccaccgtcgcgcgcac- - - - - - - - -gcctctacatctgcgcgggctgcggccg-3' -10



Zfp771-KO-3 5'-catccgccaccgtcgcgc- - - - - - - - - - - cgcctctacatctgcgcgggctgcggccg-3' -14

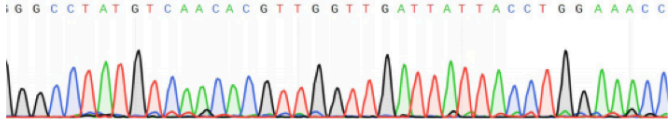


B

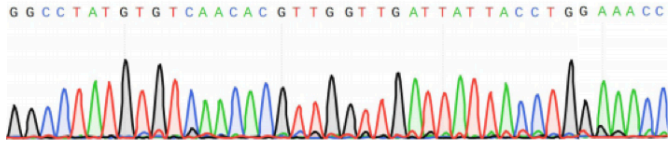


genome: 5'-ggcctatgcttgtcaacacgttggttgattattacctggaaacc-3'

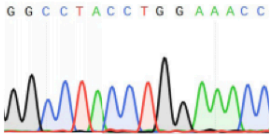
Tsc1-KO-1:5'-ggcctatg- - -tcaacacgttggttgattattacctggaaacc-3' -4



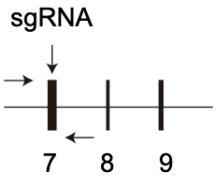
Tsc1-KO-2: 5'-ggcctatg- -tgtcaacacgttggttgattattacctggaaacc-3' -2



Tsc1-KO-3: 5'-ggccta- cctggaaacc-3' -28 -4

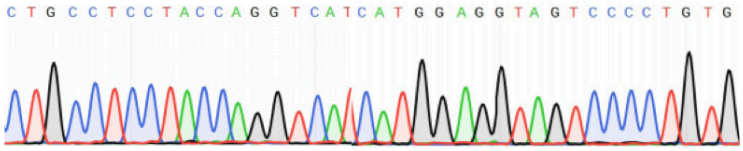


C

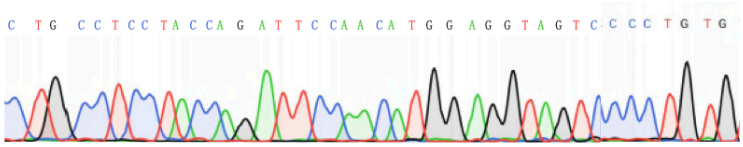


genome: 5'-ctgcctcctaccagattccaacagggtcatcatggaggtagtcccctgtg-3'

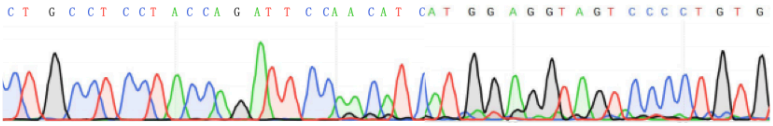
4930519G04Rik-KO-1: 5'-ctgcctcctaccag- - - - - - - - - gtcatcatggaggtagtcccctgtg-3' -11



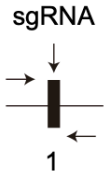
4930519G04Rik-KO-2: 5'-ctgcctcctaccagattccaaca- - - - - - - tggaggtagtcccctgtg-3' -9



4930519G04Rik-KO-3: 5'-ctgcctcctaccagattccaaca- - - - - tcatggaggtagtcccctgtg-3' -6

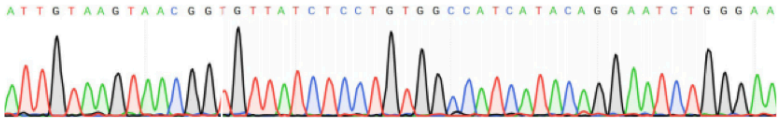


D

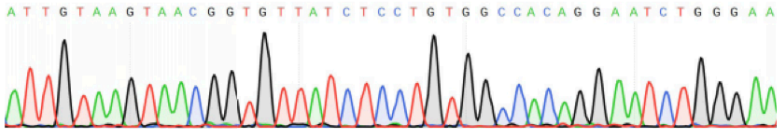


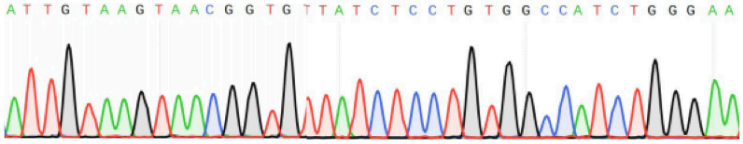
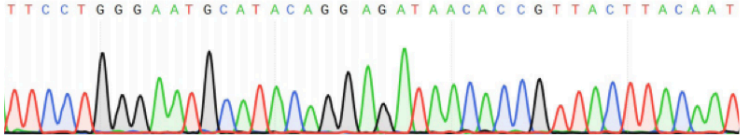
genome: 5'-ttcccagattcctgtacatgatggccacaggagataacaccgttacttacaat-3'

Olfr769-KO-1: 5'-ttcctgta- - tgatggccacaggagataacaccgttacttacaat-3' -2



Olfr769-KO-2: 5'-ttcccagattcctgt- - - - - -ggccacaggagataacaccgttacttacaat-3' -7
5'-ttcccagattccca- - - gatggccacaggagataacaccgttacttacaat-3' +2 -6





Olfr769-KO-3: 5'-ttcccagattcctgggaatgcat- - -acaggagataacaccgttacttacaat-3' +9 -10