

Table S2. The sequences of the *AIP4* promoter and the mutants driving the luciferase promoter.

Name	Location	Sequence
Wildtype	hg38_dna range=chr20: 34362774-34 363773	GGCCGCCGCCCTCACAGGGCCACGTCGCCCGCG CCGGCCCCGCCGCCGGGCCCGCGCGTAGGCCGA ACCGCTGGAGAGTGGCCCCAGGCGGGGCTGAGG GGCGAGGGGCCGGACGGTACCCACGCCCGTCGT GGCCAGCCCTTTCACAACTTGGAGCCCGCGAGG CGAAGGCCTCCGGAAGCCTGTGCCAGACACTGAT CCCTCCGAACGTCCAGACAGCCCACCCCCACCGC CCGGCCCCGGGCCAGTAGCCCGAGCTCCCCGCGCC CCCGACAGACACCGGCTCTGGAAGAAGGAGCAG CCGCGGCTCTGGGGTCCCGAACCGCGCGTCCCAC TCCTTACCCTTGTTCTCCCCGAACATTCTCATCC GGACTCCCTCCCTCTCCCGAGAAGTGCCTCGAGT TCGCCCACGGGGGTTTACCGGGACTCGGGGCGGC GGCGACTCCTCAGTCCCTAGACTAAGATGGCAGC CGGTCCCGAGCCCCGACCACAGCTACTAGAGCGA GTTAGCAGCTAAAGCGCAGGCGCCTGAGCGCGG AAGTGGTCTAGACTACAAGCCCCAGCAGG CCTTG CGCGCCAGCCGTCCGGCCCCGCCCTGGCTTGAAG AGCTGGCTGCGGTGGTAAATCAGTTAAATCCCAG TTTTCCCTCAGCTCCAGGTGAGATGGGCGCGAGCG GCTCCCAGCACCTCCAGGCTTTTTTTTTTTTTTAA CACCCCGCCCACCAGAGCCTATAAGGACTGTGAT TCTCAAACCTATGGTGTGCATCAGAATCACCTAGAG AGCTTATTAACCTTACACTGCTGACCCCCACCCC CAGAGTTTCTGATCAGAAGATCTGGCATAGGAGG ATAGGGTCTGATAATTTGCATGTCCAACAAGCTGT CTAGTGATACTGCTAGTGAGTGAAATCATAATTTG AGAACCAATGGGCTATATAGCTTAGTTTATAACTTA GTTGTTCTTTTTCTTTTTCTTTTCCTTTTCTTTTT TTTCTTC
Mutant	hg38_dna range=chr20: 34362774-34 363773	GGCCGCCGCCCTCACAGGGCCACGTCGCCCGCG CCGGCCCCGCCGCCGGGCCCGCGCGTAGGCCGA ACCGCTGGAGAGTGGCCCCAGGCGGGGCTGAGG GGCGAGGGGCCGGACGGTACCCACGCCCGTCGT GGCCAGCCCTTTCACAACTTGGAGCCCGCGAGG CGAAGGCCTCCGGAAGCCTGTGCCAGACACTGAT CCCTCCGAACGTCCAGACAGCCCACCCCCACCGC CCGGCCCCGGGCCAGTAGCCCGAGCTCCCCGCGCC

---

CCCGACAGACACCGGCTCTGGAAGAAGGAGCAG  
CCGCGGCTCTGGGGTCCCGAACCGCGCGTCCCAC  
TCCTCTACCCTTGTTCTCCCCGAACATTCTCATCC  
GGACTCCCTCCCTCTCCCGAGAACTGCCCGAGT  
TCGCCCACGGGGGTTTACCGGGACTCGGGGCGGC  
GGCGACTCCTCAGTCCCTAGACTAAGATGGCAGC  
CGGTCCCGAGCCCCGACCACAGCTACTAGAGCGA  
GTTAGCAGCTAAAGCGCAGGGCGCCTGAGCGCGG  
AAGTGGTCTAGACTGAGGTAAAAGTAGTTCCTTG  
CGCGCCAGCCGTCCGGCCCCGCCCTGGCTTGAAG  
AGCTGGCTGCGGTGGTAAATCAGTTAAATCCCAG  
TTTTCTCAGCTCCAGGTGAGATGGGCGCGAGCG  
GCTCCCAGCACCTCCAGGCTTTTTTTTTTTTTTAA  
CACCCCGCCCACCAGAGCCTATAAGGACTGTGAT  
TCTCAAACCTATGGTGTGCATCAGAATCACCTAGAG  
AGCTTATTAACCTTACACTGCTGACCCCCACCCC  
CAGAGTTTCTGATCAGAAGATCTGGCATAGGAGG  
ATAGGGTCTGATAATTTGCATGTCCAACAAGCTGT  
CTAGTGATACTGCTAGTGAGTGAAATCATAATTTG  
AGAACCAATGGGCTATATAGCTTAGTTTATAACTTA  
GTTGTTCTTTTTCTTTTTCTTTTCCTTTTCTTTTT  
TTTCTTC

---