Table S1 Coding sequences of primers involved in construction of humanized *TIE2-R849W* plasmid vector

Primer Name	Coding Sequence
TIE2-over (pcDNA3)	
Forward	5’-GAGACCCAAGCTTGGTACCG-3’
Reverse	5’-AGAGTCCATGGTGGCCCTATAGTGAGTCGTATTAA-3’
TIE2-IF-1 (CDS)	
Forward	5’-GCCACCATGGACTCTTTAGCCAGCTT-3’
Reverse	5’-ATCAGCGAGCTCTAGCTAGGCCGCTTCTTCAGCAG-3’
TIE2-IF-2 (BGH polyA)	
Forward	5’-CTAGAGCTCGCTGATCAGCC-3’
Reverse	5’-CCAAGCTTGGGTCTCTCCCCAGCATGCCTGCTATT-3’
TIE2-R849W-over	
Forward	5’-CTCCTTCACTTCGCTGCCGACGTGGCCCGG-3’
Reverse	5’-CGGTATGCCTTCTCTCTCACACTGGAGCCC-3’
TIE2-R849W-insite	
Forward	5’-AGAGAAGGCATACCGAGGATGACCCCAAAGATAGT-3’
Reverse	5’-AGCGAAGTGAAGGAGATGATGGGAGGACAGTGTGGACGCGG-3’
TIE2-R849W	
Forward	5’-AAGAAGGATGGGTTATGGATGGATGCTGCCATCAA-3’
Reverse	5’-TAACCCATCCTTCTTGATGCGCGCCTTAAG-3’

Table S2 Coding sequences of primers involved in real-time qPCR

Gene Name	Primer Sequence
pik3r2	
Forward	5’-GAGGAAGCTAAGGGACCAATATC-3’
Reverse	5’-GTCGTCCAGCAGAGAATAGAAG -3’
foxo1b	
Forward	5’-CTACGAGTGGATGGTGAAGAG-3’
Reverse	5’-TTCCCTGTTCCTTCATTCTGG-3’
cd146	
Forward	5’-GCGTGCTCTATTACCTCTACAAG-3’
Reverse	5’-ACAGCCTCTTCAGATTTACCG-3’
nr2f1a	
Forward	5’-TCCTATTGACCAACACCATCG-3’
Reverse	5’-GGATCCCCATTCGTTAGCG-3’
s1pr1	
Forward	5’-TCATTACTGCAGGATTACGCG-3’
Reverse	5’-GCAAGGTTTTCTCAAGTCAGG-3’
egfl7	
Forward	5’-GTGGAGAACGTTACTGAAGAGG-3’
Reverse	5’-ATTGGTTCGCTCAGACAGG-3’
bmp4	
Forward	5’-CCAACACCGTGAGAGGATTC-3’
Reverse	5’-CCTGTTTGATCTGGGTCTGAG-3’
wnt8a	
Forward	5’-CTCTACTCACAAAGGCTTGAGAA-3’
Reverse	5’-CAAGACTGCAGTTTCTGGTTAAAG-3’
wnt9a	
Forward	5’-CGCTACAAAATGCTGGATGG-3’
Reverse	5’-TCAGTGGCAGAATGGACAG-3’
lrp5	
Forward	5’-GCTCCTCTCTATGACCGAAAC-3’
Reverse	5’-ACGGGCTGTTGGATGAATAA-3’
lrp6	
Forward	5’-TGAGGTGCTGTTCTTCAGTAATC-3’
Reverse	5’-GTTGGAGTCCTCGATCACAATC-3’
frzb	

Forward	5’-TCCGGCTGTCTGTGTCCTCCGCTCAC-3’
Reverse	5’-GTCCTCCTCCCGTTTGCAGCCTGGTC-3’
fzd7a	
Forward	5’-CCCGCCACTATCGTGATCGCCTGCTA-3’
Reverse	5’-CCGCGTAACAGTCCGCACGAGACATTC-3’
fzd7b	
Forward	5’-CGAGCGCAAAAGGAGGCAGAT-3’
Reverse	5’-CTGGCGCGTACATGGAGCAGA-3’
β-catenin	
Forward	5’-ATCATGCGCTCCCCACAGATGGTA-3’
Reverse	5’-GCCTCCGCTGGCCAGAATGATAAG-3’
gsk-3β	
Forward	5’-ATCTTAATCCCCGCTCATGC-3’
Reverse	5’-CAGGTTGAGGTGTTAGAGGC-3’
axin1	
Forward	5’-GACATGGAGAGGAACCAGAAG-3’
Reverse	5’-ATGACCCTGAGCTTTCTTGG-3’
axin2	
Forward	5’-CTTACCCTCGGACACTTCAAG-3’
Reverse	5’-CCCTCATACATTGGCAGAACTG-3’
COX2	
Forward	5’-CCTTCCGGCCATCATTCTTATT-3’
Reverse	5’-CCGCAGATTTCAGAGCATTGTC-3’
dkk1b	
Forward	5’-TCGCCCATGAAAACTCTACTG-3’
Reverse	5’-TGGACCAAAAGTGACGAGC-3’
ef1	
Forward	5’-GGAAATTCGAGACCAGCAAATAC-3’
Reverse	5’-GATACCAGCCTCAAACTCACC-3’