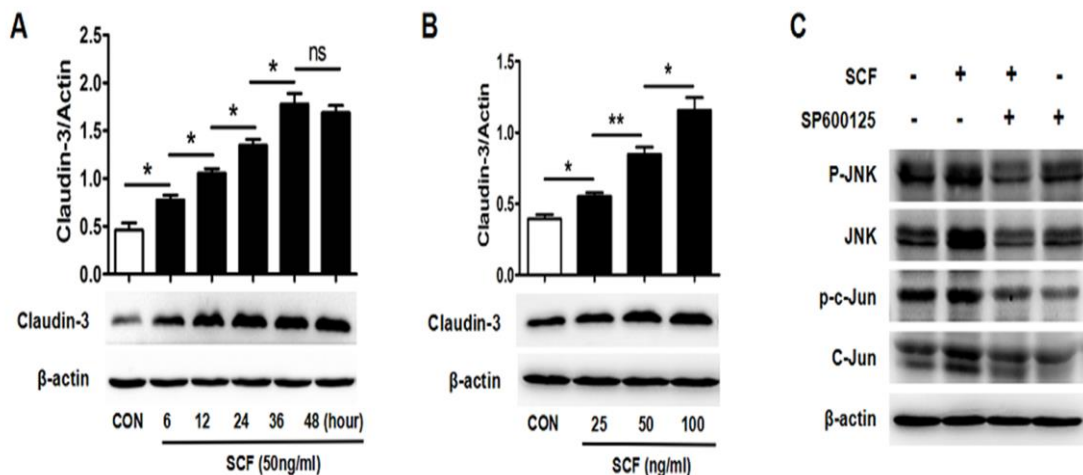


Supplementary Figure S1. HT-29 cells were exposed to rhSCF alone or in combination with U0126, SP600125, or SB203580, respectively. Phosphorylation of ERK1/2 (A), p38 (B) and JNK (C) was increased after rhSCF treatment while decreased after treatment with their inhibitors.



Supplementary Figure S2. Western blot indicated that activation of c-kit signaling by exogenous rhSCF in DLD-1 cells significantly increased claudin-3 expression in a time- (A) and dose- (B) dependent manner. The values are mean \pm SEM of three independent experiments (* $p < 0.05$, ** $p < 0.01$); (C) C-Jun activated by SCF/c-kit signaling was attenuated by SP600125 treatment in DLD-1 cells.

Primer Name	Sequences
Cldn3	5' - CCGCTCGAGGCATCTTTGGGTACCTTTGCG - 3'
	5' - GAAGATCTCCAGATGTTCTGCGACGTGATG - 3'
GAPDH	5' - AACCCACCGCCCGTTACAGGCTGAGCCTGTG - 3'
	5' - CACAGGCTCAGCCTGTAACCGGGCGGTGGGGTT - 3'

Supplementary Table S1. Primers for Real-time PCR

Primer Name	Sequences
Cldn3 promoter	5' - CCGCTCGAGGCATCTTTGGGTACCTTTGCG - 3'
	5' - GAAGATCTCCAGATGTTCTGCGACGTGATG - 3'
Cldn3 Mutant 1	5' - AACCCACCGCCCGTTACAGGCTGAGCCTGTG - 3'
	5' - CACAGGCTCAGCCTGTAACCGGGCGGTGGGGTT - 3'
Cldn3 Mutant 2	5' - CACCCCAAGCCCTGTACATCCCCTCCCGT - 3'
	5' - ACCGAGGACGGGATGTAACAGGGGCTTGGGGTG - 3'
Cldn3 Mutant 3	5' - GCGCGCCGTCGGTGTACAGTCCGTCCGTCC - 3'
	5' - GGACGGACGGACTGTAACACCGACGGCGCGC - 3'

Supplementary Table S2. Primers for plasmid construction

Primer Name	Sequences
Cldn3 -510 to -504	5' - GCATCTTTGGGTACCTTTGCG - 3'
	5' - CCTCCCGTACACACGTCG - 3'
Cldn3 -287 to -281	5' - AAAAGCGCCCAAAGTGGTG - 3'
	5' - CTTGTCCCTCTCTGCTCGG - 3'
Cldn3 +98 to +104	5' - GTATGGAGCCGAGCCGTTAG - 3'
	5' - TGCGGGGAGACGAGGG - 3'

Supplementary Table S3. Primers for ChIP