

Supplementary Table 1

Primers used for quantitative real-time PCR analysis for the Wnt activity of intestinal organoids		
Gene	Forward primer	Reverse primer
ACT1Nb	CATTGCTGACAGGATGCAGAAGG	TGCTGGAAGGTGGACAGTGAGG
Myc	GCCCACTGAGGATATCTGGA	ATCGCAGATGAAGCTCTGGT
Cyclin D1	GGCACCTGGATTGTTCTGTT	CAGCTTGCTAGGGAACCTGG
Axin2	GGGGGAAAACACAGCTTACA	TTGACTGGGTGCGTTCTCTT

Primers used for quantitative real-time PCR analysis for β -cat Δ N/RasV12 cells		
Gene	Forward primer	Reverse primer
ACT1Nb	GGCACCCAGCACAAATGAAG	ACAGTGAGGCCAGGATGGAG
MMP1	TTCGGGGAGAAGTGATGTTT	CTGACCCTGAACAACCCAGT
MMP2	CCACTATTGGTGGGAACCTCG	TGCGACCAGGAATAAGCTGT
MMP3	CCAAGTGGAGGAAAACCTCACC	CCAGGTCCATCAAAAGGGTTA
MMP7	ATCCATTTGATGGACCAGGA	GTCGGATACATCACGGCATC
MMP9	ATCTTCCTGGGCAAGCAGTA	TGGCACCGATGAATGATCTA
MMP11	CTAACGAGATTGCCCCACTG	CCCAATACTGAGCACCCCTGA
MMP13	AGGTGCTTGTCTGGGAGAGA	GCTCTGCAAGCTGGAAGTCT
MMP14	TGCCCAATGGAAAGACCTAC	CATCACTGCCCATGAATGAC
MMP15	GACATCAGTGCTGCCTACGA	CGCTGTGTCTCCTCATTGAA
MMP17	AGCCTTGCAGAGGACACACT	TTGAGTTCTGCGTGATCCAG
MMP19	GCCATAGGAACAACCCTGAA	GTGGCTAGTGCTGGGACATT
MMP21	ACGGGGATCCTATCCAAATC	GGCCTGATCCTTGTCACTGT
MMP23B	GGCCAGAAGATCCTTCACAA	ACTCGCCAGGAGTAGGTGCT
MMP26	ACTGTTTTCTGCCTTGCTG	GACGTGACACAACCAGCATC
MMP28	CAAGCCTGGACGATTTTGT	ACTGAGCCAGGAGTTCTGA
ADAM9	GGCACAAGATGTGACAATGG	TCCACACTTCCTCCGTATCC
ADAM10	GGGCAATGTGCAGTTCTAT	GATGGTTTCGACCAACGAAGT
ADAM15	GGCCTCACACTGGACAATTT	GATGCAACTCCCAGGACACT
ADAM17	CTGTGGTGCAAAAGCAGAAA	CTGCCTAATGCCTCCCAATA
ADAM18	GACCATGCTGCACATCAAAC	CAATACGCAGTTCCCAACCT
ADAM22	CCAGGTATGCAGAAGGTGGT	GACACAGCAGGCAAGAATGA
ADAM23	AAGAACCCTCTCACACCT	CCACTGGAGTGTGTCATTGG
ADAM28	TGTGTGATGGCAAATCTGGT	ATCCACCTTCATTCTGCTG
ADAM33	CCCCATGTGGACCTAGAATG	ACCAAATCCTGGCTTGTAC

Primers used for quantitative real-time ChIP analysis		
Gene	sense	antisense
<i>MMP21</i>	GGCAACCACTGGGTCTGACT	TCCGTACGCTGTCAAGTATTTGAA