

Supplementary Table S1

Usage	Oligo name	Sequence	Product size (bp) WT/3HA
Primer evaluating correct targeting	P1	TCTGTCTACCTTCAATACACAACCTGACAT	1170/1263
	P2	AAAAAGCTCCTAGAGGTTTCAGATTCAAAGT	
	P3	TAGTTTTGCATGTACCTAAATGATTTGCAT	1462/1555
	P4	AGAACTTTCTCTCCCAACATTCTCTACCTC	
Primers for regular genotyping	P5	GGAGGCGAGTCGAGCGAGAGGAG	345/252
	P6	GCACTCACAGTGCTTGGGTGAAGGC	
qRT-PCR	Lgr4	AACCTGGAACCTGGACTT	124
		CTCCATCCGGGATAACAGAA	
	Lgr5	CCTGTCCAGGCTTTCAGAAG	173
		CTGTGGAGTCCATCAAAGCA	
	Mmp7	GGCCTAGGCGGAGATGCTCACT	77
		AACAGGAAGTTCACTCCTGCGTCC	
	Def5	TTCTCCAGGTGACCCCAGCC	179
		GCAGACCCTTCTTGGCCTCAAAG	
	Crypt	AGGAGCAGCCAGGAGAAG	192
		ATGTTTCAGCGACAGCAGAG	
	Axin2	TAGGCGGAATGAAGATGGAC	103
		CTGGTCACCCAACAAGGAGT	
	Muc2	GGCCTCACCACCAAGCGTCC	118
		CGAAGGCGTGGCACTGGGAG	
	Ubiquitin B	ATGTGAAGGCCAAGATCCAG	160
		TAATAGCCACCCCTCAGACG	