

**Table S1 A list of primers for PCR**

genes	Forward primer	Reverse primer
GAPDH	AGCCGTAACCTCTGTGCTGT	ATGGCGACGATGTCCACTTT
IL-1 $\alpha$	CAGTTGCCCATCCAAAGTTGTT	TGCCATGTGCACCAATT
IL-1 $\beta$	GAGCCTGTCATCTCGAAACG	GCACGGGTGCGTCACA
IL-6	CCACCCCAGGCAGACTACTC	CCATGCGCTTAATGAGAGCTT
IL-8	CGATGCCAATGCATAAAAAC	CTTTCCCTGGGGTTAGGC
LRRC75A-AS1	CCAGCCAAGACAAGGTAAG	AAAGGTGCCAAATCCGTTCTT
ZO-1	GCGAAATGAGAAACAAGCACC	ATGAGTTGAGTTGGCAGGAC
Occludin	CAGCAGCAGTGGTAACTTGGA	CCGGTCGTGAGTCTGTTCAT
Claudin-1	AAGACGACGAGGCACAGAAGA	GAAGGTGCTGGCTGGATAG
LRRC75A (344 bp ~ 500 bp)	TCACGCACGACCTCATCATC	TTCCTCTTACCAAGCCCAC
LRRC75A (1194 bp ~ 1339 bp)	TAACTCCTCTCGGTCTT	GGTCTCCAGATTACAGTAG
LRRC75A for cloning	ATGGGCACCCGGCAGAC	CCTGTATTCCCCGTACGTCT
U6	CGCTTCGGCAGCACATATAC	ACGCTTCACGAATTGCGTGT
$\beta$ -actin	ATCACCATCGGAATGAGCGGTTC	CGGATGTCGACGTCACACTCATGA

**Table S2 The single-strand DNA used in the study**

	Sequence of sgRNA(5'-3')	Complementary sequence of sgRNA(5'-3')
sgRNA1	<b>CACCG</b> TGCCGGCTCTAAACTCTGC	<b>AAAC</b> GCAGAGTTAGAGCCGGCAC
sgRNA2	<b>CACCG</b> AAGTTTACTCACCTCGGTCC	<b>AAAC</b> GGACCGAGGTGAGTAAACTTC
sgRNA3	<b>CACCG</b> ATCCGGCTTCCATGGGGT	<b>AAAC</b> ACCCCCATGGGAAGCCGGATC
sgRNA4	<b>CACCG</b> GCACCTTTCTAGGATAG	<b>AAAC</b> CTATCCTAGAAAAAAGGTGC

Note: Every sgRNA annealed with its complementary sequence and formed a double strand DNA. Red letters indicate cohesive ends for ligation. SgRNA1 and sgRNA2 were ligated into one KO plasmid, while sgRNA3 and sgRNA4 were ligated into the other KO plasmid in the study.