

**Supplementary information Table S1 Primers for qPCR**

Gene	Species	Forward primer (5'-3')	Reverse primer (5'-3')
<i>GAPDH</i>	Human	ATGACATCAAGAAGGTG GTG	CATACCAGGAAATGAGC TTG
<i>CXCL10</i>	Human	GCTCTACTGAGGTGCTA TGTTT	GGAGGATGGCAGTGG AGTC
<i>RNF138</i>	Human	CAGACAGCGTTTACTGG ATCAC	TGGTAATCTGGCTAGGA TCTCC
<i>IFNB1</i>	Human	AGGACAGGATGAACTTT GAC	TGATAGACATTAGCCAG GAG
<i>ISG15</i>	Human	GAGAGGCAGCGAACTC ATCTT	CCAGCATCTTCACCGTC AGG
<i>IL-6</i>	Human	ACTCACCTCTTCAGAAC GAATTG	CCATCTTTGGAAGGTTC AGGTTG
<i>PTEN</i>	Human	TGGATTCGACTTAGACT TGACCT	GGTGGGTTATGGTCTTC AAAAGG

**Supplementary Table S2 Primers for shRNA**

shRNF138#1 Forward
CCGGTTTGAACGATGTGATTGATATCTCGAGATATCAATCACATCGTTCAAA TTTTTG
shRNF138#1 Reverse
AATTCAAAAATTTGAACGATGTGATTGATATCTCGAGATATCAATCACATCG TTCAAA
shRNF138#2 Forward
CCGGGCTAGATGAAGAAACCCAATACTCGAGTATTGGGTTTCTTCATCTAGC TTTTTG
shRNF138#2 Reverse
AATTCAAAAAGCTAGATGAAGAAACCCAATACTCGAGTATTGGGTTTCTTC ATCTAGC
shRNF138#3 Forward
CCGGCCTAGCCAGATTACCAGAAATCTCGAGATTTCTGGTAATCTGGCTAG GTTTTTG
shRNF138#3 Reverse
AATTCAAAAACCTAGCCAGATTACCAGAAATCTCGAGATTTCTGGTAATCTG GCTAGG

**Supplementary Table S3 Primers for sgRNA**

Gene	Species	Forward primer (5'-3')	Reverse primer (5'-3')
<i>RNF138-sgRNA#1</i>	Human	CACCGCAAAACGCCCCG TGCGGACCA	AAACTGGTCCGCACGGGC GTTTTG

<i>RNF138-sgRNA#2</i>	Human	CACCGTAGAAATCATCT TCGGTGT	AAACACACCGAAGATGAT TTCTAC
<i>Rnf138-sgRNA</i>	Mouse	CACCGTCGGCGGCCAC GTCCTACA	AAACTGTAGGACGTGGCC GCCGAC