

Supplementary Table 1 siRNA sequence information for knockdown target genes in this study

Gene name	Sense strand	Note
Murine double minute 2	AAGCCAUUGCUUUUGAAGUUA	10.1038/s41419-018-0968-0
Murine double minute 4	GGAAGGAUUGGUAUUCAGATT	10.1038/s41419-020-02971-3
Cyclin-dependent kinase 9	GCUGCUAAUGUGCUUAUCA	j.ebiom.2018.12.022

Supplementary Table 2 Primers for RT-qPCR in this study

Gene name	Sequence 5' to 3'	Note
Murine double minute 2	Forward: AGG AGA TTT GTT TGG CGT GC Reverse: TGA GTC CGA TGA TTC CTG CTG	10.1038/nm.2863
Murine double minute 4	Forward: AGG TGC GCA AGG TGA AAT GT Reverse: CCA TAT GCT GCT CCT GCT GAT	10.1038/nm.2863
Tumor protein p53	Forward: GAG CTG AAT GAG GCC TTG GA Reverse: CTG AGT CAG GCC CTT CTG TCT T	10.1111/jcmm.17594
Cyclin-dependent kinase 9	Forward: CCC TTT TTG TGA TGA GGT GAC Reverse: ATC TCC CGC AAT GCT GTA ATG	10.1186/s12864-021-07653-8
Vascular endothelial growth factor receptor-1	Forward: CAG GCC CAG TTT CTG CCA TT Reverse: TTC CAG CTC AGC GTG GTC GTA	10.1210/jc.2003-031580
Vascular endothelial growth factor receptor-2	Forward: CCA GCA AAA GCA GGG AGT CTG T Reverse: TGT CTG TGT CAT CGG AGT GAT ATC C	10.1210/jc.2003-031580
B-Raf proto-oncogene serine/threonine kinase	Forward: CTG TTT TCC TTT ACT TAC TAC ACC TCA GAT Reverse: CAA CTG TTC AAA CTG ATG GG	10.1038/s41598-020-72809-7
Glyceraldehyde-3-phosphate dehydrogenase	Forward: TGC CAT GTA GAC CCC TTG AAG Reverse: ATG GTA CAT GAC AAG GTG CGG	10.1038/nm.2863

Supplementary Table 3 Antibodies used in this study

Antibodies purpose	Antigen recognized	Species	Source or reference
Loading control	Glyceraldehyde-3-phosphate dehydrogenase	Rabbit	CST, #5174
Loading control	Tubulin	Rabbit	CST, #2146
Loading control	Actin	Mouse	CST, #3700
Primary	Murine double minute 2 (MDM2)	Rabbit	Zenbioscience, #310329
Primary	Murine double minute 4 (MDM4)	Mouse	Zenbioscience, #220238
Primary	Phosphorylated MDM2 (pMDM2)	Rabbit	Zenbioscience, #R22951
Primary	Phosphorylated MDM4 (pMDM4)	Rabbit	Cusabio, #CSB-PA010531
Primary	Cyclin-dependent kinase 9 (CDK9)	Rabbit	Zenbioscience, #R23893
Primary	Tumor protein p53 (TP53)	Rabbit	CST, #2527S
Secondary	Horseradish peroxidase mouse	Mouse	Invitrogen, #31430
	Immunoglobulin G (HRP mouse IgG)		
Secondary	Horseradish peroxidase rabbit	Rabbit	Invitrogen, #31460
	Immunoglobulin G (HRP rabbit IgG)		