

Table S1. Primary antibodies used in Western Blot

Primary antibody	Manufacturer	Dilution
anti-Alix	ProteinTech, 12422-1-AP, Wuhan, China	1:2000
anti-TSG101	Abcam, ab125011, MA, USA	1:1000
anti-CD63	Abcam, ab134045, MA, USA	1:1000
anti-Calnexin	Abcam, ab133615, MA, USA	1:1000
anti-GM130	ProteinTech, 11308-1-AP, Wuhan, China	1:2000
anti-GAPDH	ProteinTech, 60004-1-Ig, Wuhan, China	1:5000
anti-NFAT5	Santa Cruz, sc-398171, CA, USA	1:1000
anti-BAX	Abcam, ab32503, MA, USA	1:1000
anti-BCL 2	Abcam, ab32124, MA, USA	1:1000
anti-Caspase 3	ProteinTech, 19677-1-AP, Wuhan, China	1:1000

Table S2. Primers for RT-qPCR

Gene		Sequence (5'-3') or product number
Human- BAX	Forward	GGAGGAAGTCCAATGTCCAG
	Reverse	GGGTTGTCGCCCTTTTCTAC
Human- Bcl 2	Forward	GAGAAATCAAACAGAGGCCG
	Reverse	CTGAGTACCTGAACCGGCA
Human- NFAT5	Forward	GGGTCAAACGACGAGATTGTG
	Reverse	GTCCGTGGTAAGCTGAGAAAG
Human- β -action	Forward	TGACGTGGACATCCGCAAAG
	Reverse	CTGGAAGGTGGACAGCGAGG
Rat- BAX	Forward	GGCGATGAACTGGACAACAA
	Reverse	GCAAAGTAGAAAAGGGCAACC
Rat- Bcl 2	Forward	ACAGAGGGGCTACGAGTGGG
	Reverse	AGCGGGCGTTCGGTTG
Rat- NFAT5	Forward	CAGATCCAGCTGGTGCTTTGAG
	Reverse	TATGCCTTGGGCTGAAGCTG
Rat- β -action	Forward	GAAGTGTGACGTTGACATCCG
	Reverse	GCCTAGAAGCATTGCGGTG
miR-381-3p	Forward	Ribobio: miRA1000269-1-100
miR-17-5p	Forward	Ribobio: miRA0000070-1-100
miR-210-3p	Forward	Ribobio: miRA0000267-1-100
miR-20a-5p	Forward	Ribobio: miRA0000075-1-100
U6	Forward	Ribobio: miRAN0002-1-100

Figure S1. (A-C) Quantitative results of Alizarin Red staining. (D-E) The mRNA and protein expression levels of NFAT5 were detected after transfection of si-NFAT5. (F) Expression of miR-381-3p was detected by RT-qPCR. (G-H) Alizarin Red S staining, Ca^{2+} content, and AKP activity results were detected after transfection of si-NFAT5 (scale bar = 100 μm). (I) Apoptosis ratio was measured by flow cytometry. (J-L) Western blot and qRT-PCR was used to detect the mRNA and protein expression of BAX, BCL-2 and cleaved caspase-3. * $P < 0.05$ compared with the Si-NC group; # $P < 0.05$ compared with the Pi+Si-NC group.

