Title: Tacrolimus improves therapeutic efficacy of umbilical cord blood-derived mesenchymal stem cells in diabetic retinopathy by suppressing DRP1-mediated mitochondrial fission

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Running Title: Therapeutic effect of tacrolimus-pretreated MSCs on diabetic retinopathy

-700 GTAATCCCAACACTTTGGGAGGCCGAGGCGGGTGGATCACTAGGTCCGGAGATCGAGACC

-640 ATCCT<mark>GGAAA</mark>ACACAGTGAAACCCCGTCTCTACTAAAAATACAAAAAATTAGCCGGGCGT

-580 AGTGGTGGGTGCCTGTAGTCCCAGCTACTCCGAAGGCTGAGGCAGGAGAATGGCGTGAAC

-520 CCGGGAGGCGGAATTTGCAGTGGGCCGAGATCGCGCCACTGCACTCCAGCCTGGGCGACA

-460 GAGTGAGACTCCGTCTCAAAAAAAAAAAAAAAAAATAAATAAATAAAAAATAAATAAAAGGA

-400 AGTGACACTGGATAATTAAGAGACACACCATTGCGCCTTTAACACATATTCACACCCAGC

-340 ACTGTCACATCCATCGTGCCTTGAGGACAGGCATAAATTTACGGCCTTCCTCCTGCGCTC

-280 CCGGCCTGCTCCTAGCCTTTGACTAGAGCCTGCGCAGCATCCCAGTCCCAGGCTAGGGCC

-220 CACCGGTGCCGCGCAGCCTCCTGGAAGCTGTGGGGAGTAGCGTTCCTCCGCTCCAGAACT

-160 ACAACTCCCAGCAGGCCTTGCTCCTCTCCACCTCCCTCGCAGCGCATGGCCTGCCGGGAG

-100 GGGGCAGGTAGCCGGCGGGCCCGGTCCAATGGGTGCCGGCTTCCGAGGAGAGGGCGGAGG

-040 AGAGGAGGAAGGAGGCGAACTGTGGGCCCCGGCCCCATTC

Fig. S1. The NFAT binding site in the DNML1L_1 promoter. The NFAT binding site in the DNML1L_1 promoter is shown. The yellow shaded box represents the consensus sequences of NFATC1.
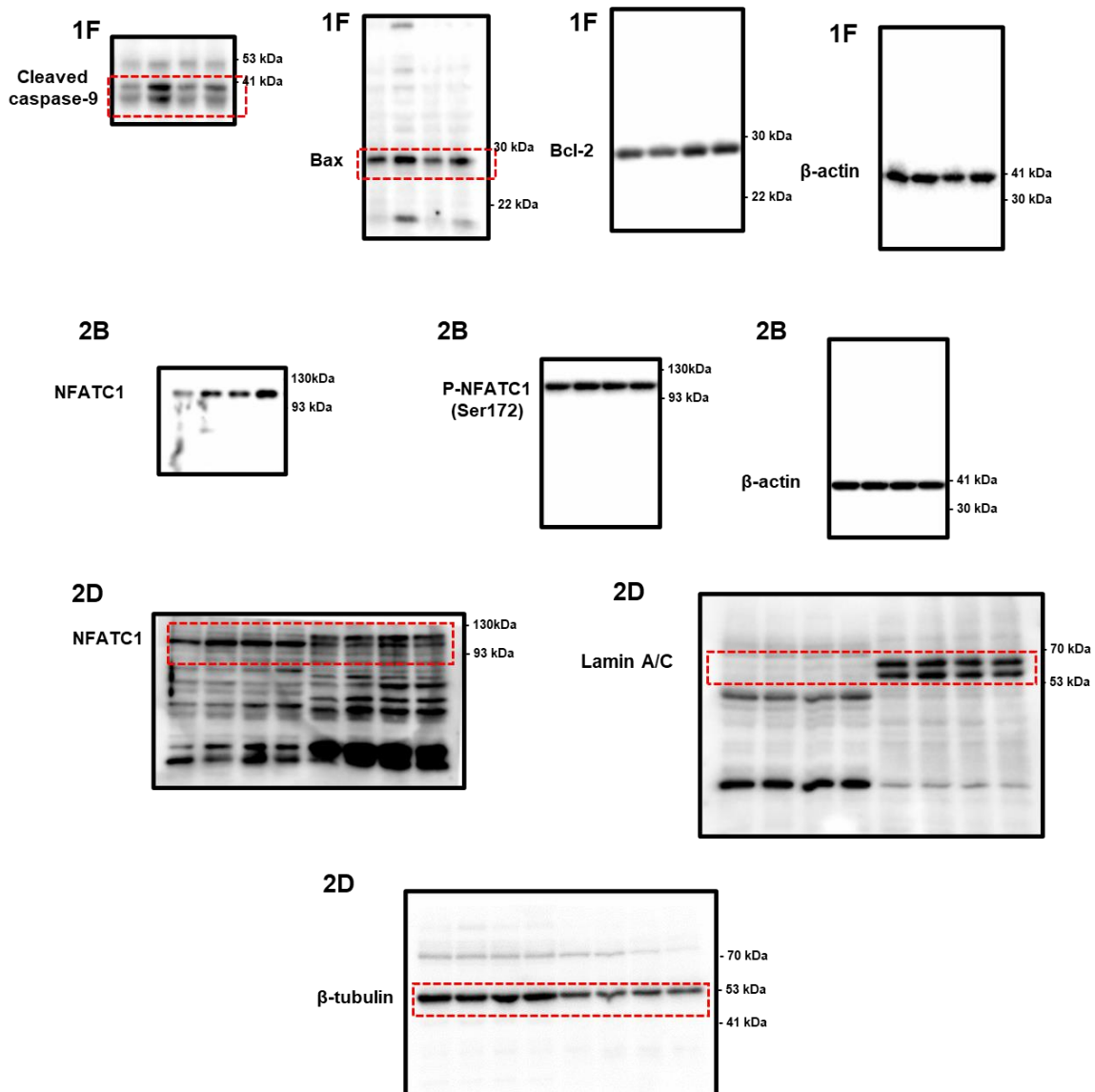
Fig. S2. Full-length gel images for key data in figures 1F-2D. All western blot images are full-length blot images of key blot data in the figures 1F-2D. Dash line box indicates cropped blot image in the figures 1F-2D.
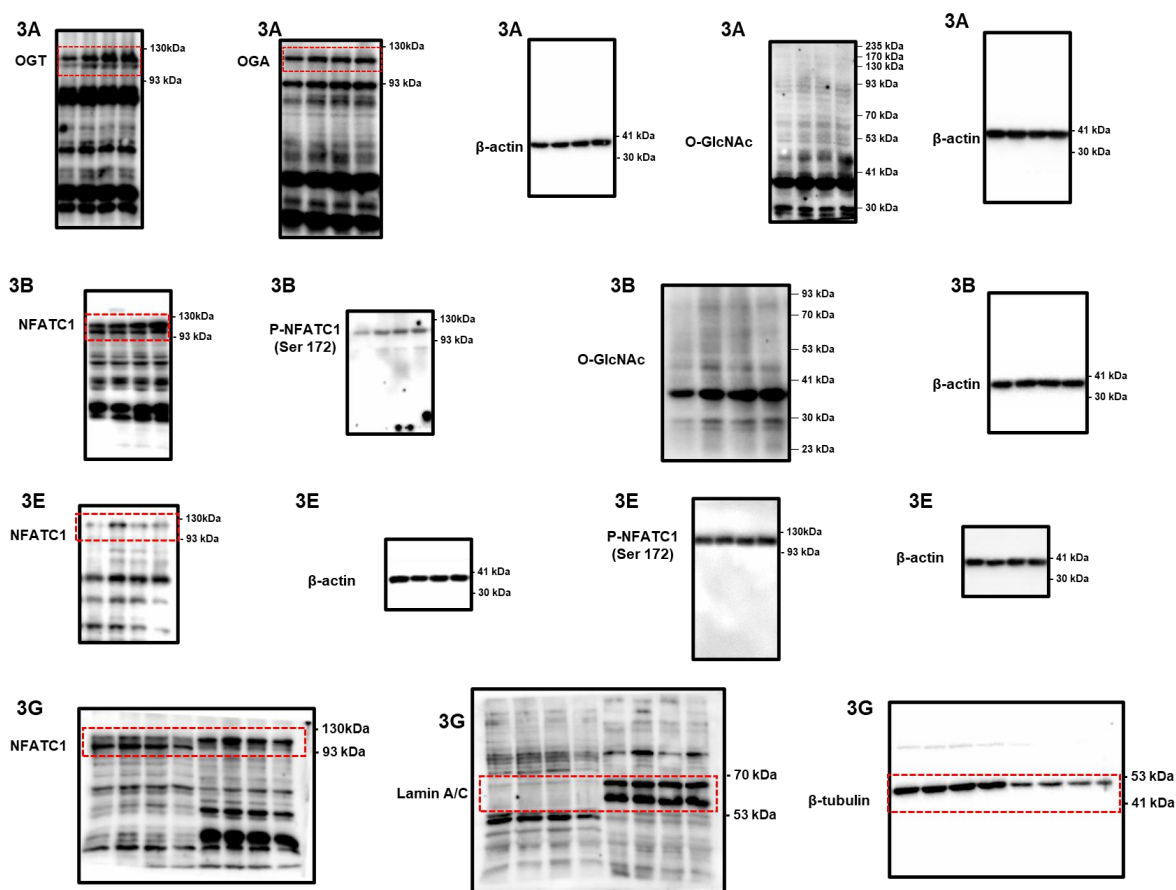
Fig. S3. Full-length gel images for key data in figures 3A-3G. All western blot images are full-length blot images of key blot data in the figures 3A-3G. Dash line box indicates cropped blot image in the figures 3A-3G.
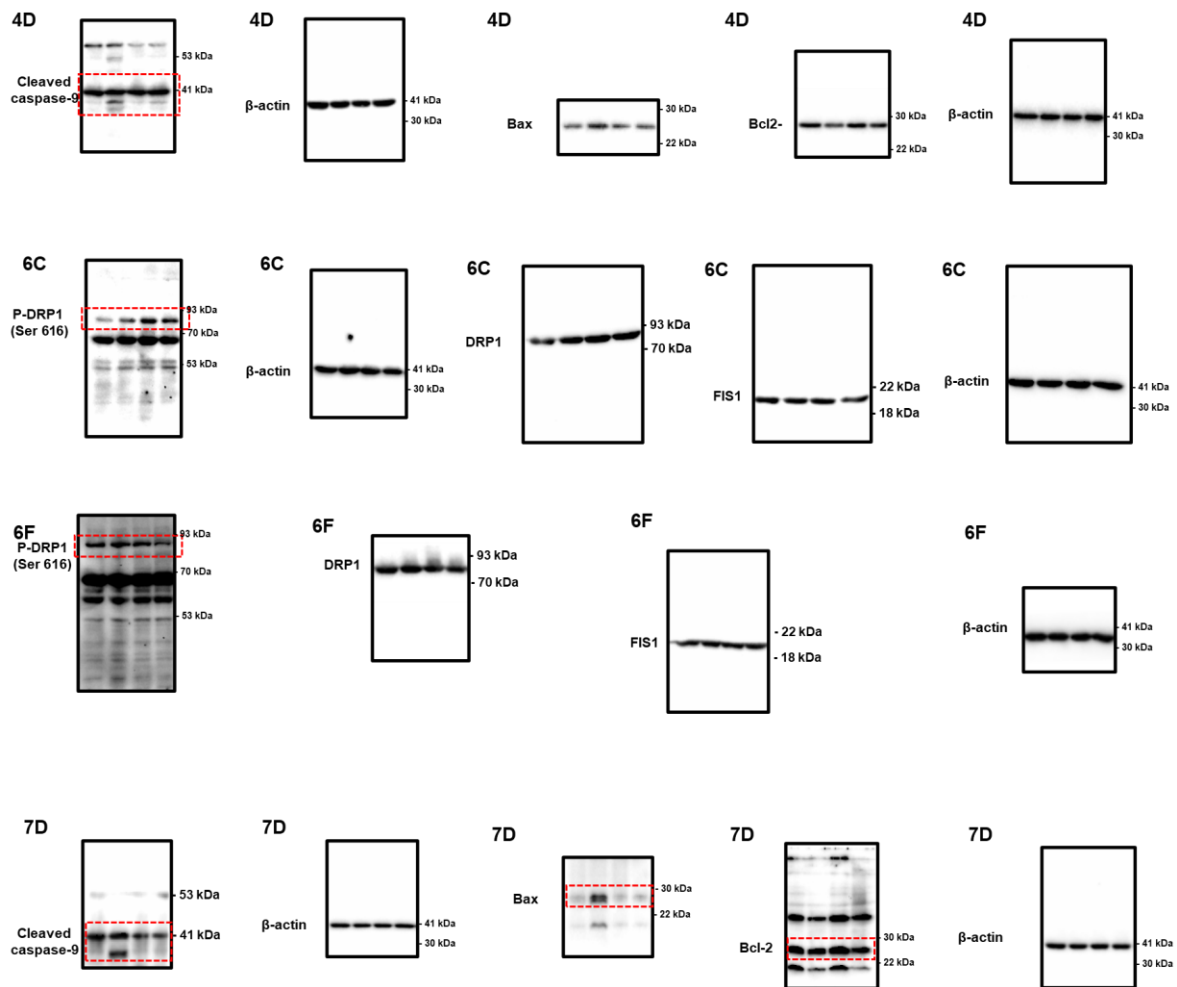
Fig. S4. Full-length gel images for key data in figures 4D-7D. All western blot images are full-length blot images of key blot data in the figures 4D-7D. Dash line box indicates cropped blot image in the figures 4D-7D.

Table. S1. Sequences of primers used for real-time PCR

Gene	Identification	Sequence (5'-3')	Size (bp)	Accession number
DRP1	Sense	CAGTGTGCCAAAGGCAGTAA	212	XM_054370716.1
	Antisense	GATGAGTCTCCCGGATTTCA		
FIS1	Sense	CTTGCTGTGTCCAAGTCCAA	213	XM_054356644.1
	Antisense	CCACAGCCCCGTTTTATTTA		
MFN1	Sense	TTGGAGCGGAGACTTAGCAT	163	NM_033540.3
	Antisense	TTCGATCAAGTTCCGGATTC		
OPA1	Sense	GGCCAGCAAGATTAGCTACG	154	NM_015560.3
	Antisense	ACAATGTCAGGCACAATCCA		
ACTB	Sense	CCACCATGTACCCTGGCATT	189	NM_001101.5
	Antisense	CGGACTCGTCATACTCCTGC		