Supplemental Methods

Mouse QPCR primers:

Col1a1

F: CGATGGATTCCCGTTCGAGT

R: CGATCTCGTTGGATCCCTGG

Col1a2

F: CTGGTCCTGTTGGAAGTCGT

R: CAGATGCACCTGTTTCTCCA

Mmp1

F: AACTACATTTAGGGGAGAGGTGT

R: GCAGCGTCAAGTTTAACTGGAA

Mmp2

F: CAAGTTCCCCGGCGATGTC

R: TTCTGGTCAAGGTCACCTGTC

Mmp3

F: ACATGGAGACTTTGTCCCTTTTG

R: TTGGCTGAGTGGTAGAGTCCC

Mmp7

F: CTGCCACTGTCCCAGGAAG

R: GGGAGAGTTTTCCAGTCATGG

Mmp8

F: TCTTCCTCCACACACAGCTTG

R: CTGCAACCATCGTGGCATTC

Mmp9

F: CTGGACAGCCAGACACTAAAG

R: CTCGCGGCAAGTCTTCAGAG

Mmp13

F: CTTCTTCTTGTTGAGCTGGACTC

R: CTGTGGAGGTCACTGTAGACT

Mmp14

F: CAGTATGGCTACCTACCTCCAG

R: GCCTTGCCTGTCACTTGTAAA

Timp1

F: GCAACTCGGACCTGGTCATAA

R: CGGCCCGTGATGAGAAACT

Timp2

F: TCAGAGCCAAAGCAGTGAGC

R: GCCGTGTAGATAAACTCGATGTC

Timp3

F: CTTCTGCAACTCCGACATCGT

R: GGGGCATCTTACTGAAGCCTC

Timp4

F: TGTCTACACGCCATTTGACTC

R: TGGACATCTCCTTACTTGGCA

Ddr1

F: ATGCTGACATGAAGGGACATTT

R: GGTGTAGCCTACGAAGGTCCA

Ddr2

F: ATCACAGCCTCAAGTCAGTGG

R: TTCAGGTCATCGGGTTGCAC

Itga1

F: CCTTCCCTCGGATGTGAGTCA

R: AGTTCTCCCCGTATGGTAAGA

Itga2

F: TGTCTGGCGTATAATGTTGGC

R: CTTGTGGGTTCGTAAGCTGCT

Itgb1

F: ATGCCAAATCTTGCGGAGAAT

R: TTTGCTGCGATTGGTGACATT

Mfge8

F: AGATGCGGGTATCAGGTGTGA

R: GGGGCTCAGAACATCCGTG

Fap

F: GTCACCTGATCGGCAATTTGT

R: CCCCATTCTGAAGGTCGTAGAT

Mrc1

F: CCACTCTGGGCCATGAGGCTTC

R: CTGAATGATCGCATGCTCATTC

Mrc2

F: GAGTCACCCCAGTCTGCAAT

R: CACTGCCATCGAAGACTCAA

Ctsk

F: GAAGAAGACTCACCAGAAGCAG

R: TCCAGGTTATGGGCAGAGATT

Ctsb

F: TCCTTGATCCTTCTTTCTTGCC

R: ACAGTGCCACACAGCTTCTTC

Ctsd

F: GCTTCCGGTCTTTGACAACCT

R: CACCAAGCATTAGTTCTCCTCC

Ctsl

F: ATCAAACCTTTAGTGCAGAGTGG

R: CTGTATTCCCCGTTGTGTAGC

Ctss

F: CCATTGGGATCTCTGGAAGAAAA

R: TCATGCCCACTTGGTAGGTAT

Gapdh

F: GTTGTCTCCTGCGACTTCA

R: GGTGGTCCAGGGTTTCTTA

Actb

F: CCAACCGTGAAAAGATGACC

R: ACCAGAGGCATACAGGGACA

Human QPCR Primers:

MRC2

F: CACTGCTATTCTTTCCACAT

R: ACATTCTCCATCTCATCCA

MZF1

F: AGTGTAAGCCCTCACCTCC

R: GGGTCCTGTTCACTCCTCAG

ACTB

F: AGAGCTACGAGCTGCCTGAC

R: AGCACTGTGTTGGCGTACAG

Supplemental Figure Legends

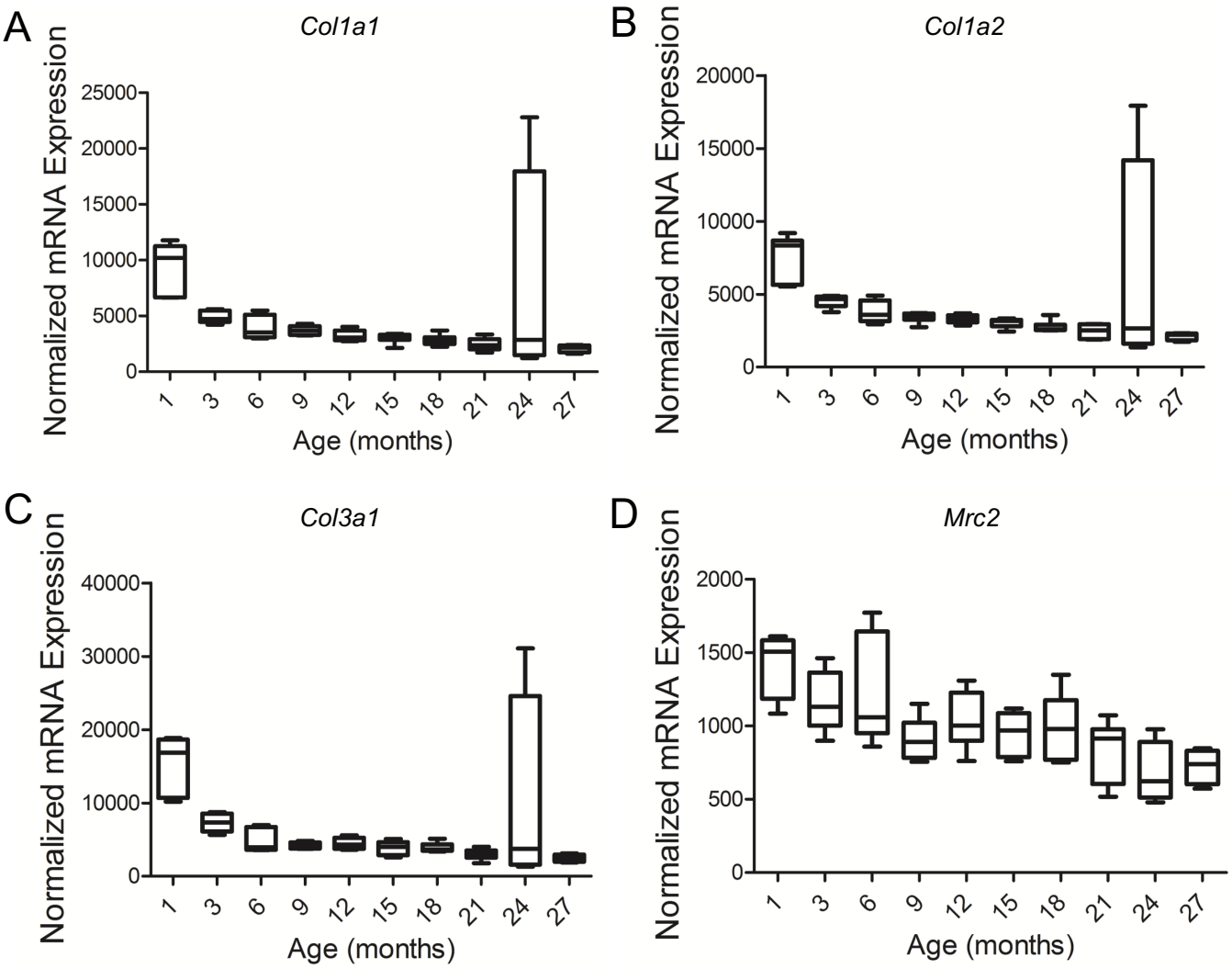
Supplemental Figure 1. (A-D) Collagen transcription and *Mrc2* transcription in whole lung decrease during the lifespan. Normalized transcriptomic data from lung over the mouse lifespan at indicated timepoints for *Mrc2* (A), *Col1a1* (B), *Col1a2* (C), *Col3a1* (D), N=3-6; data are re-analyzed from: GSE132040.

Supplemental Figure 2. *Mrc1* (Mannose receptor) transcript or protein levels are not decreased during the lifespan. (A) Representative Western blot for *Mrc1* in young versus mature whole mouse lung specimens, N=4 male mice in each group. (B) QPCR of *Mrc1* from young vs. mature mouse whole lung N=5 male mice in each group. (C) Normalized transcriptomic data from lung over the mouse lifespan for *Mrc1*.

Supplemental Figure 3. Flow gating strategy. Gating strategy as pictured demonstrates gating out debris, gating for singlets, gating for live cells, gating for CD45 and then F4/80 or PDGFRA.

Supplemental Figure 4. Validation of MRC2 antibody for flow cytometric applications. (A) HEK293T cells were transfected with pCI-*Mrc2* and then stained with the sheep anti-MRC2 antibody; an untransfected control is shown as is a control without primary antibody. (B) Lysates were made from cells sorted from gates in panel (A) and then Western blot analysis was performed. (C) Flow staining of MRC2 on CD45-PDGFRA- cells is shown, N=2-4.

Supplemental Figure 5. Validation of *MZF1* reagents. (A) QPCR for *MZF1* after shRNA knockdown of *MZF1* in U937 cells vs. Scramble or sh-*MRC2* controls, N=5. (B) Flow cytometry for BFP in lipofectamine treated versus Empty Vector (EV, BFP only) or MZF1-BFP transfected cells. (C) Q-RT-PCR for *MZF1* in lipofectamine treated versus Empty vector (BFP only) or MZF1-BFP transfected cells. (D) Western blot of cell lysates from same conditions as (C) for MZF1 (100kD and 129kD bands are shown, endogenous MZF1 in U2OS cells appears at 100kD, the construct used in this figure has a 29kD BFP fused to MZF1 giving a predicted molecular weight of 129kD); GAPDH is a loading control. Statistics: (A) ANOVA.



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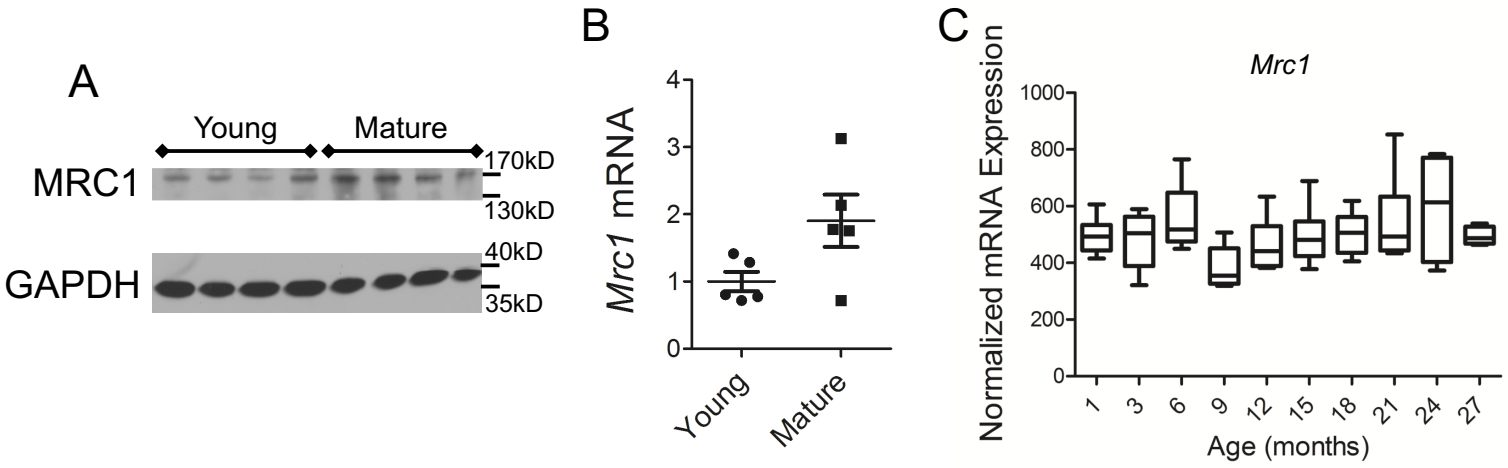

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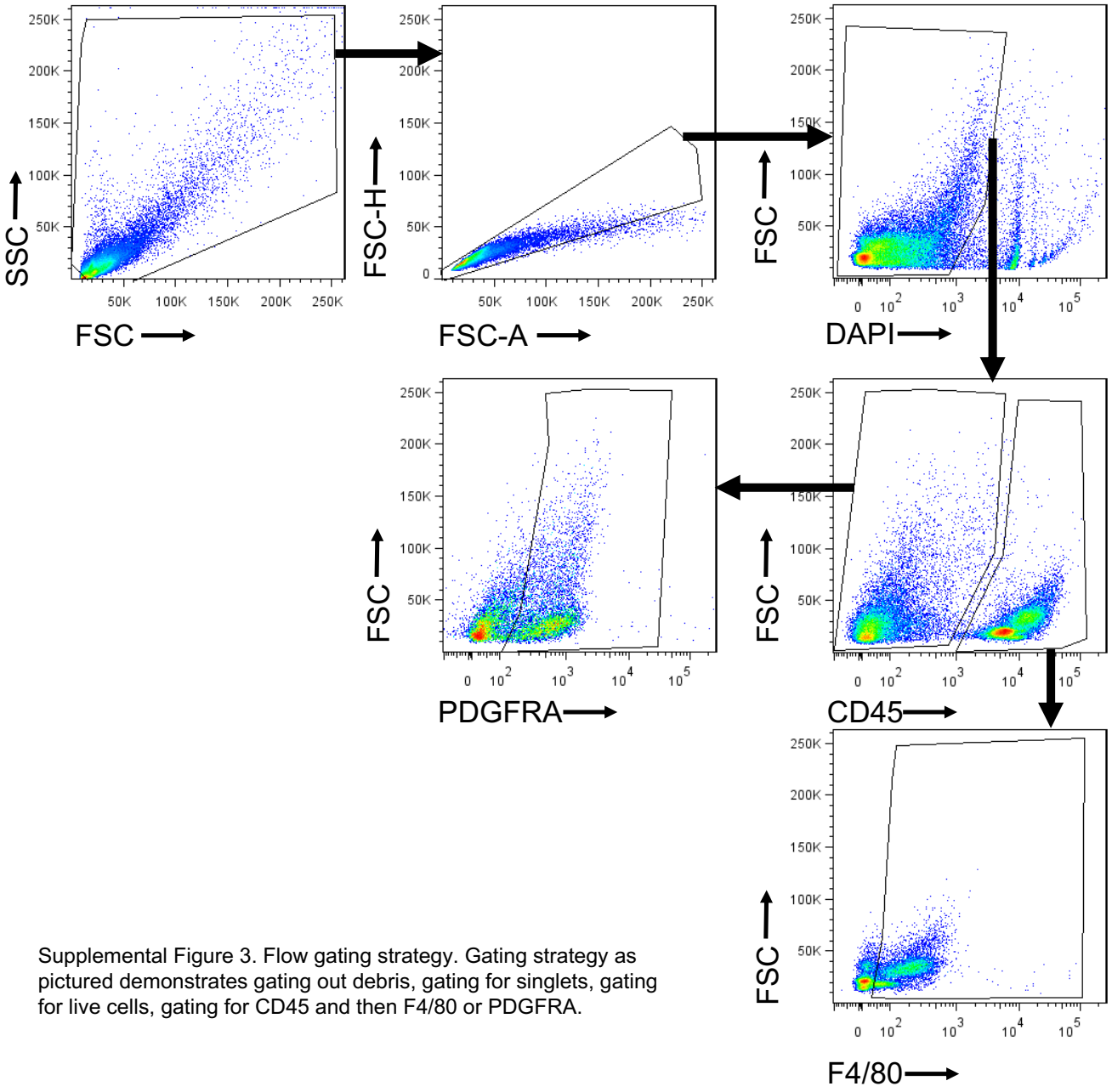

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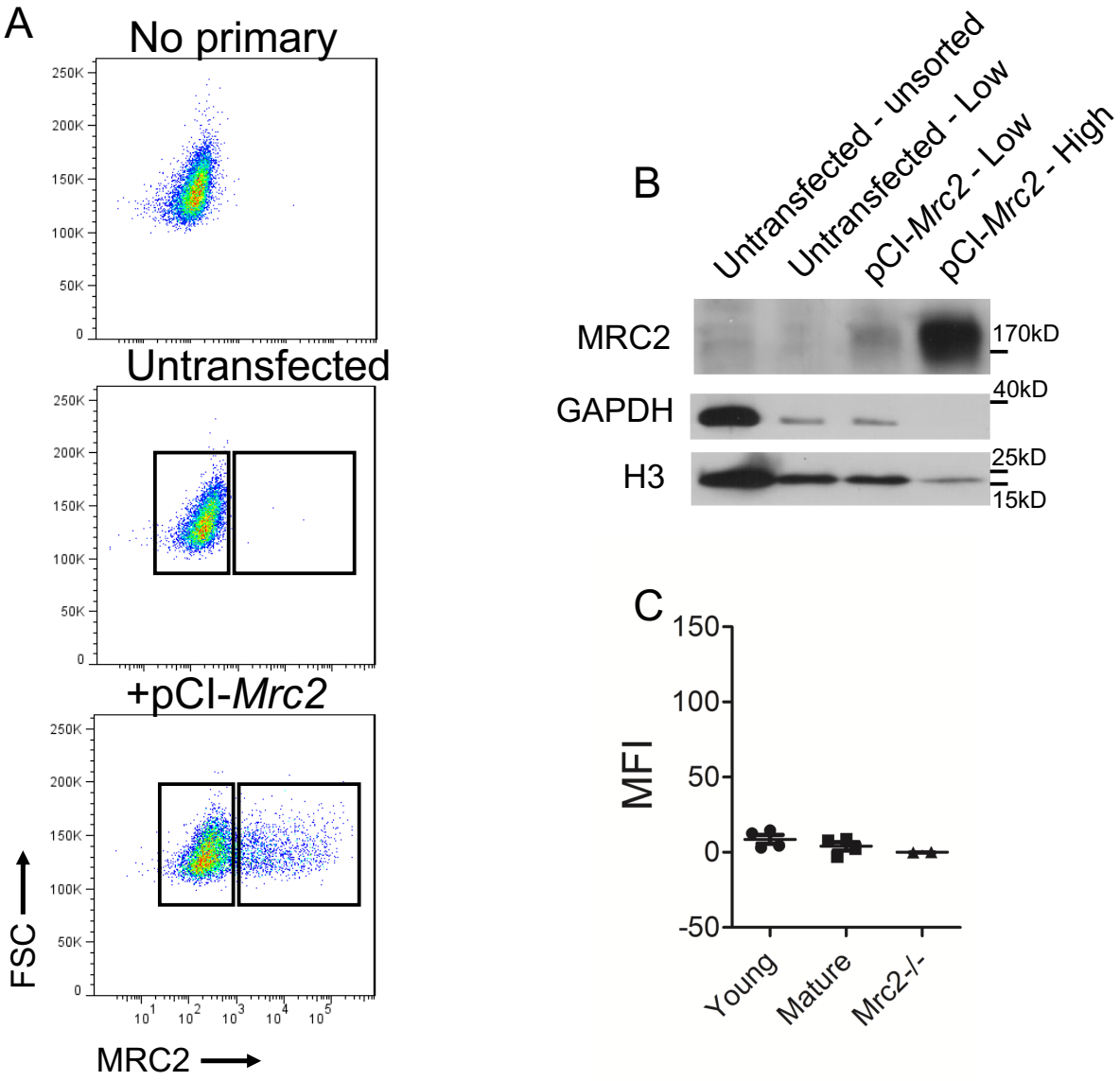

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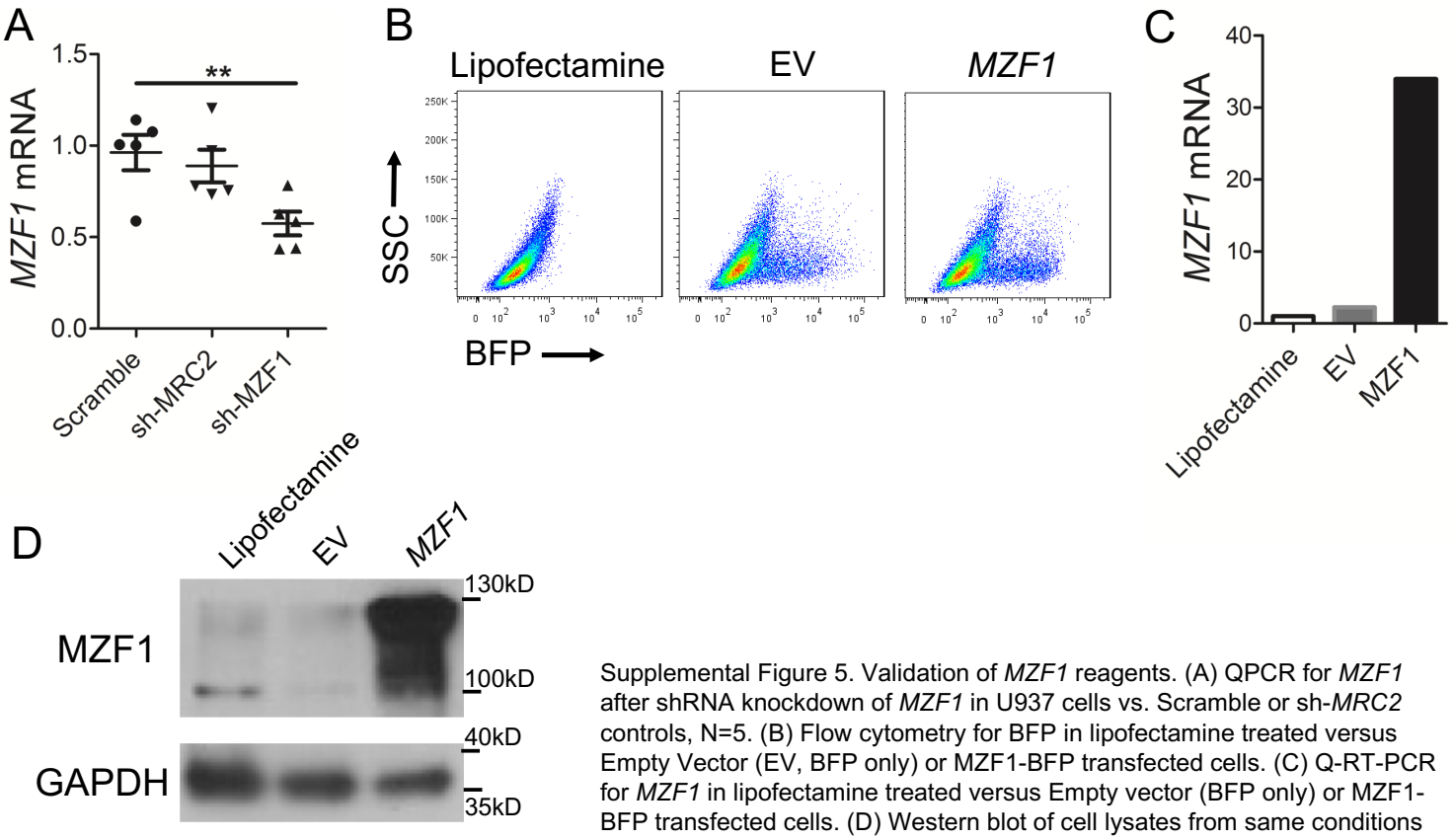

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