## SUPPLEMENTAL MATERIAL

Figure S1.

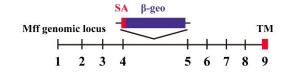


Figure S2.

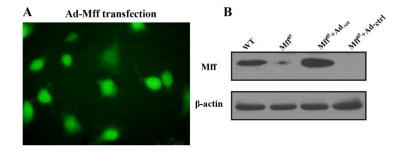


Figure S3.

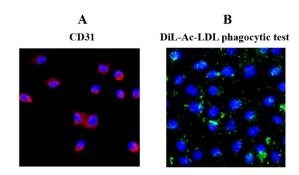
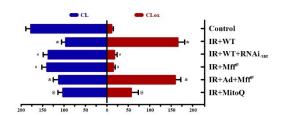


Figure S4.



## **Supplemental Figure Legends:**

**Figure S1.** Schematic depicting gene trap insert in Mff locus. In briefly, the exon/intron structure is derived from Ensembl (transcript ID: ENSMUST00000078332). Exon 3 is the first coding exon, and exon 9 encodes the transmembrane (TM) segment. The gene trap vector pGT01xr with splice acceptor (SA) and lacZ/neomycin phosophotransferase fusion gene (β-geo) is inserted immediately after the sequence 5'-GCACTCCTCTGTCTGCCTTG-3' in the intron following exon 4. Exon 4 encodes the Mff motifs essential for Drp1 recruitment. As a result, the gene trap insertion is ideally positioned to disrupt all Mff isoforms.

**Figure S2. A.** The transfection of Ad-Mff in CMEC. **B.** Western blots were used to assess the Mff overexpression under Mff<sup>gt</sup> by Ad-Mff.

**Figure S3. A.** CD31 immunocytochemistry of CMECs. **B.** Dil-acetylated low-density lipoprotein intake assay. green, CD31; red, Dil-ldl.

**Figure S4.** Evaluation of the number of non-oxidized and oxidized molecular species of CL in CMEC.