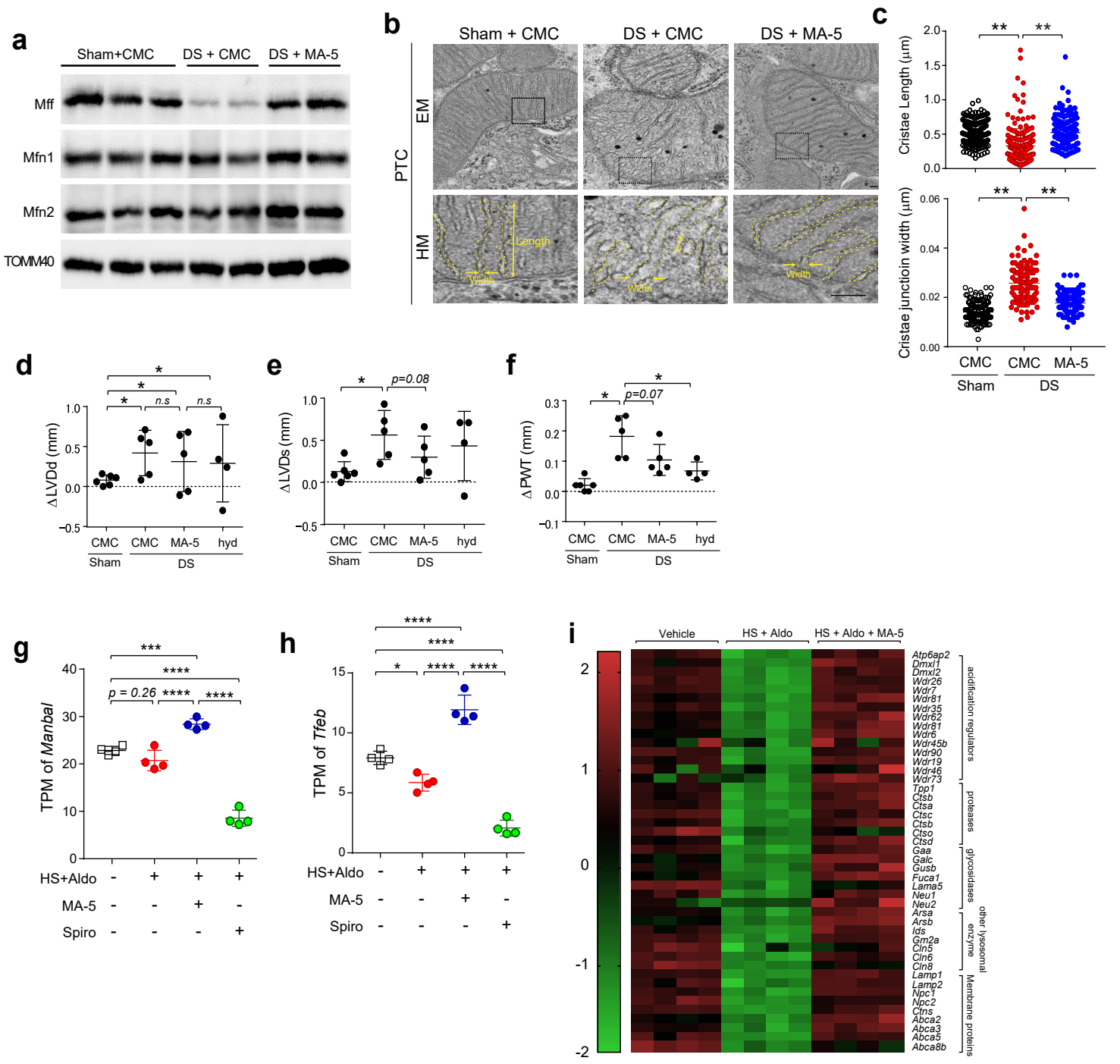
Supplementary Figure 3



Supplementary Fig. 3. The effects of MA-5 on mitochondrial dynamics-related genes, proteins and cristae structure in the DS mice and MDCTs.

(a) Western blots for Mff, Mfn1, Mfn2 and TOMM40 in the kidneys of Sham+CMC, DS+CMC, and DS+MA-5. (b) Representative images of high magnification mitochondria in TECs of the kidneys of sham+CMC, DS+CMC, and DS+MA-5. (c) Quantitative analysis of cristae length and width in cristae junctions in 200 mitochondria of sham+CMC, DS+CMC, and DS+MA-5. (d) Change in LVDd, (e) LVDs, and (f) PWT at 3 weeks versus day0 in the 3-week-DS treatment. (g) TPN values of α-mannosidase in HS+Aldo-treated MDCTs in the presence or absence of MA-5 or Spiro. (h) TPN values of TFEB in HS+Aldo-treated MDCTs in the presence or absence of MA-5 or Spiro. (i) Heat map showing lysosome-related genes in MDCTs treated with vehicle, HS+Aldo, and HS+Aldo+MA-5. *P<0.05, **P<0.01, ***P<0.001, and ****P<0.0001. MFF, mitochondrial fission factor; Mfn, mitofusin; TOMM40, translocase of outer mitochondrial membrane 40; LVDd, diastolic left ventricular diameter; LVDs, systolic left ventricular diameter; PWT, posterior wall thickening; Spiro, spironolactone; hyd, hydralazine, HS, high salt; Aldo, aldosterone; CMC, carboxymethyl cellulose; TFEB, transcriptional factor EB; MDCT, murine distal convoluted tubules.