Supplemental Figure 3. Brown fat morphology and Ucp1 levels in Mrap2<sup>tm1a/tm1a</sup> mice.

(A) H&E staining of brown fat from the wild type and Mrap2<sup>tm1a/tm1a</sup> mice on an 129/sv background showing lipid accumulation in the brown fat of the mutant mice. Scale bars = 100μm.

(B) The brown fat tissue stains positively with anti-UCP1 antibody (C) RNA levels of Ucp1 are not significantly different in the brown fat of Mrap2<sup>tm1a/tm1a</sup> mice compared to wild-types (n=3 for each genotype performed in triplicate).

(D) UCP1 protein levels in the brown fat of Mrap2<sup>tm1a/tm1a</sup> mice (representative blot shown) and UCP1 densitometry measurements (E) normalised to GAPDH points to significant variation however no statistical difference between the samples were shown (n=3 per genotype, ns=not significant).