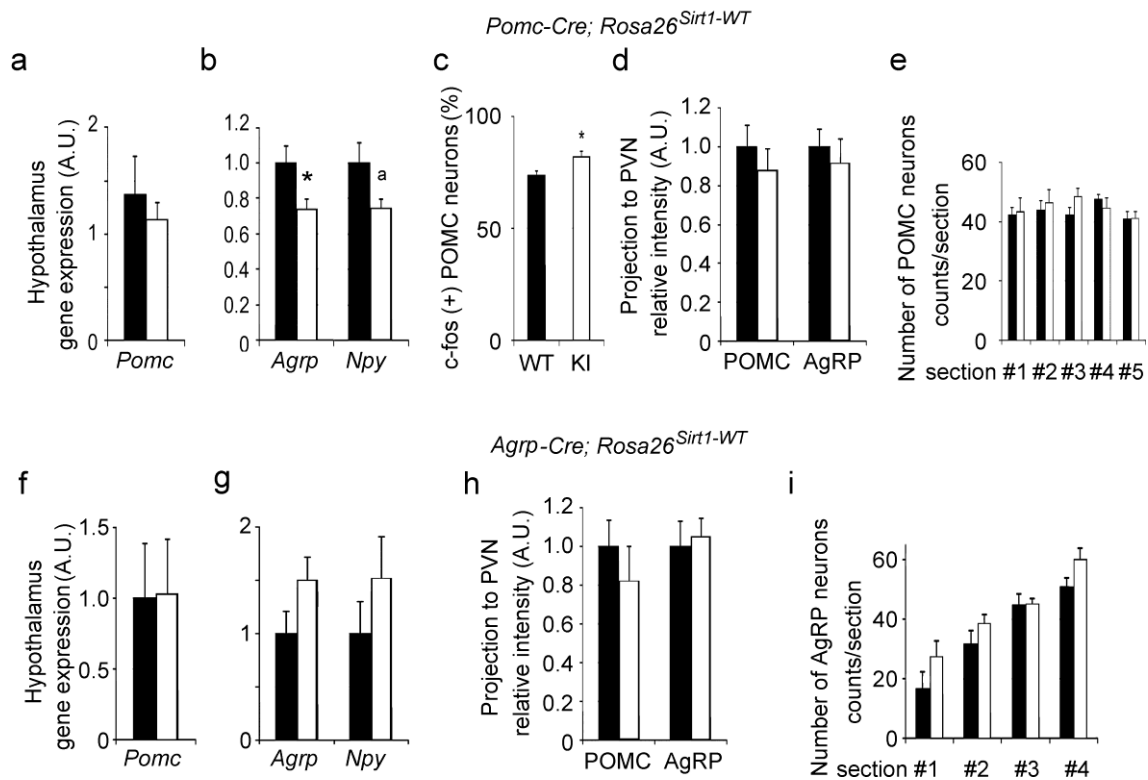


ESM Fig. 7



ESM Fig. 7, related to Fig. 5a-e. Gene expression analyses and immunohistological analyses of the hypothalamus of *Pomc-Cre; Rosa26^{Sirt1-WT}* mice and *Agrp-Cre; Rosa26^{Sirt1-WT}* mice. (a, b) Gene expression profiles in the hypothalamus of *Pomc*-Sw KI mice at 26 weeks of age. (c) The percentage of c-fos (+) POMC neurons after 24 h of fasting. (d, e) Immunohistological analyses of POMC and AgRP fibre projections to the paraventricular nucleus (PVN) (d) and the number of POMC neurons in ARC sections (e) in 12-week-old male *Pomc*-Sw KI mice (WT, n = 5; KI, n = 4). (f, g) Gene expression profiles of the hypothalamus of male *Agrp*-Sw KI mice at 28 weeks of age. (h, i) Immunohistological analysis of POMC and AgRP fibre projections to PVN (h) and the number of AgRP neurons in ARC sections (i) in *Agrp*-Sw KI mice (n = 4 or 5 per group). The same number of mice was used as in Fig. 3-4 unless otherwise indicated. Statistical analyses were performed using the two-tailed unpaired Student's *t* test (*, *p* < 0.05). For (b), there was a trend (^a*p* = 0.07). Black bars, WT data; white bars, KI data