



Figure S1. The phenotypic characterization of mice (related to Figure 1). A) Adiposity phenotypes of AxB8 mice ($n=15$ at 17°C , $n=15$ at 29°C). B) Correlation coefficient analysis between BW and FM and BW and adiposity index (FM/LM) as determined by NMR in 112D AxB8 mice. C) Diet-induced obesity phenotype determined by glucose tolerance test (GTT) and plasma parameters in 112D AxB8 mice ($n=7/\text{group}$). D) Weekly food intake of adult B6 and AxB8 mice presented as a value of kcal/g/week. E) Food intake (g/week) and (F) body weight of lactating B6 ($n=17$ at 17°C , $n=13$ at 29°C) and AxB8 females ($n=8$ at 17°C , $n=12$ at 29°C). G) Total energy expenditure and metabolic efficiency in 10D AxB8 mice (8 pups/litter). Data are mean \pm SD. * $p<0.05$; ** $p<0.01$; *** $p<0.001$.