



**Fig. S5.** Otub1 deficiency in MEFs promotes TNF- $\alpha$ -stimulated canonical NF- $\kappa$ B activation and gene expression. **a** Immunoblot analysis of the indicated proteins using cytoplasmic and nuclear extracts of *Otub1*<sup>+/+</sup> and *Otub1*<sup>-/-</sup> MEFs stimulated with TNF- $\alpha$  for the indicated time periods. **b** qRT-PCR analysis of the indicated genes in *Otub1*<sup>+/+</sup> and *Otub1*<sup>-/-</sup> MEFs stimulated with TNF- $\alpha$  for the indicated time periods. P values are determined by two-tailed unpaired t-test. \*P<0.05, \*\*P<0.01, \*\*\*P<0.001.