

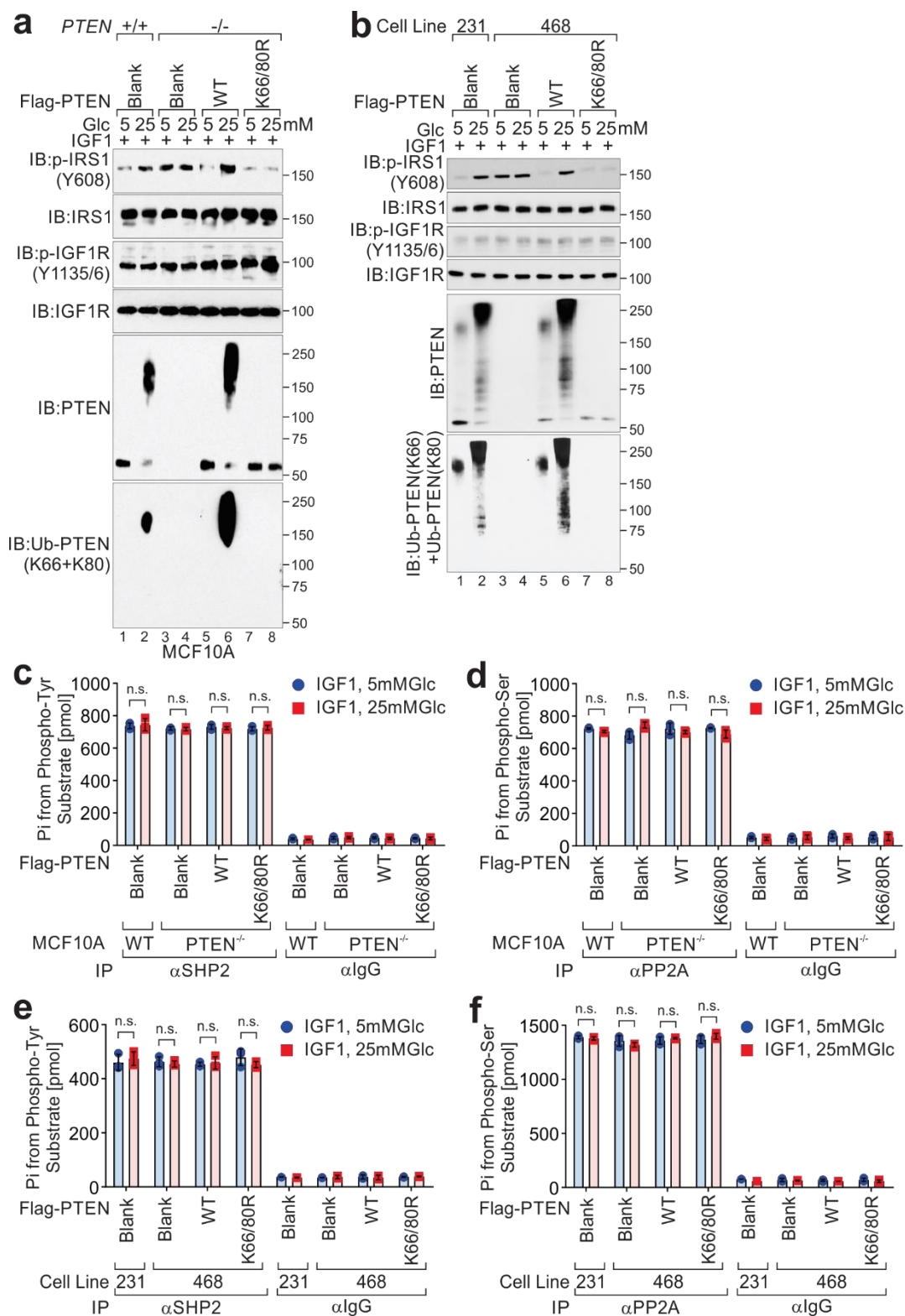


Figure S9: K27-linked polyubiquitination regulates the protein tyrosine phosphatase activity of PTEN *in vivo*.

(a) IB detection of indicated proteins in MCF10A *PTEN*^{+/+} and MCF10A *PTEN*^{-/-} cells transfected with indicated vectors, followed by glucose starvation and stimulation in the presence of 50 ng/ml IGF1. (b) IB detection of indicated proteins in MDA-MB-231 or MDA-MB-468 cells transfected with indicated vectors followed by glucose starvation and stimulation (5mM or 25mM, 1 hr) in the presence of 50 ng/ml IGF1. (c, d) Measurement of phosphatase activity of immunoprecipitated SHP2 (b) and PP2A (c) from MCF10A *PTEN*^{+/+} or MCF10A *PTEN*^{-/-} cells transfected with indicated vectors followed by glucose starvation and re-stimulation (5mM or 25mM, 1 hr) in the presence of 50 ng/ml IGF1 (1 hr), using p-Tyr (b) or p-Ser (c) as substrates respectively. (e, f) Measurement of phosphatase activity of immunoprecipitated SHP2 (e) and PP2A (f) from MDA-MB-231 or MDA-MB-468 cells transfected with indicated vectors followed by glucose starvation and stimulation (5mM or 25mM, 1 hr) in the presence of 50 ng/ml IGF1, using p-Tyr (e) or p-Ser (f) as substrates respectively. All error bars, SD, n=3 independent experiments. Student's t-test. (n.s. $p>0.05$).

