



**Supplemental Figure 16. Effects of OPTN overexpression and MAP2K5 inhibition on TNF- $\alpha$  induced NF- $\kappa$ B activation.** OPTN (wild-type or mutants)-transfected NIH3T3 cells were treated with TNF- $\alpha$  (10 ng/ml) with or without BIX 02189 (10  $\mu$ M) for 2 hr. The cell lysates were harvested, and phosphorylated p65 subunit of NF- $\kappa$ B was detected by western blot analysis. Tubulin was detected as a loading control. The results are representative of three experiments. The results of densitometric analysis (*lower*) are presented as the mean  $\pm$  SD ( $n = 3$ ); \* $p < 0.05$  versus control. # $p < 0.05$  versus TNF- $\alpha$  alone.