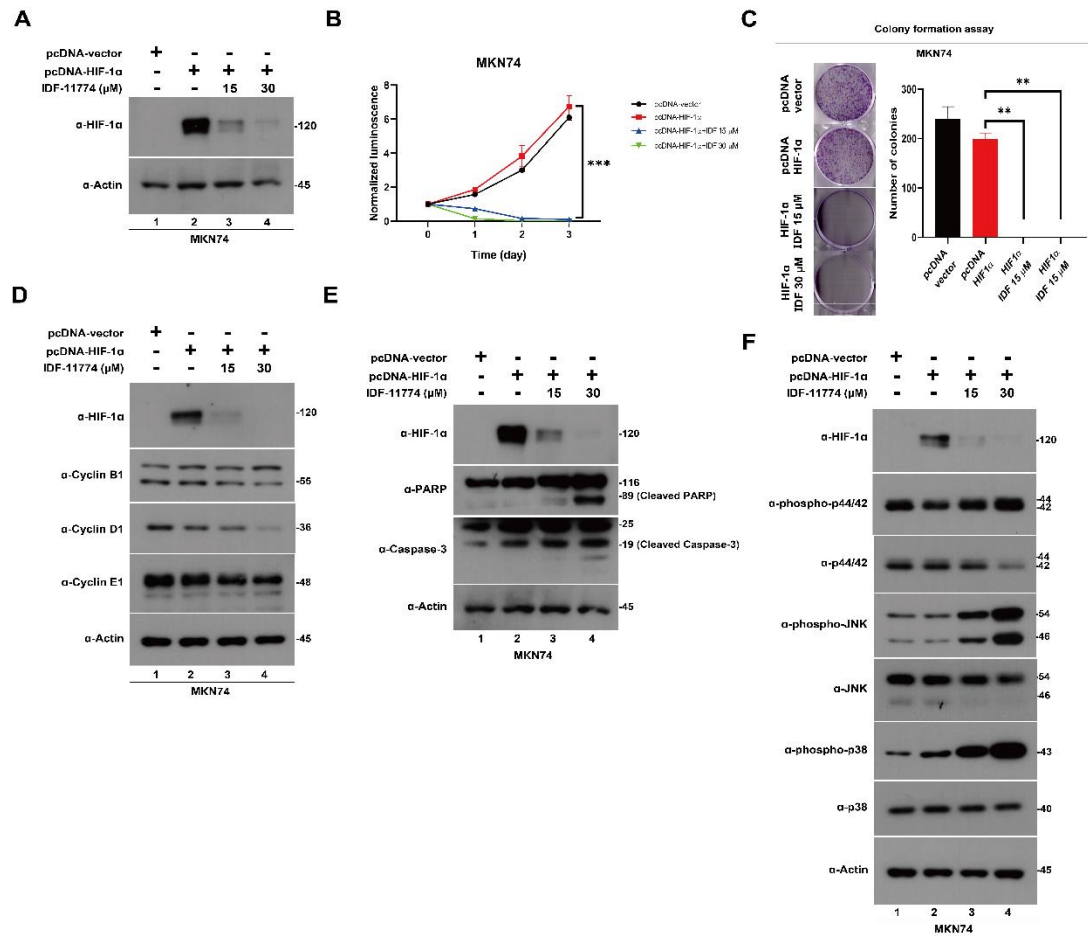


**Supplementary figure S1. IDF-11774 inhibit proliferation via cell cycle arrest, apoptosis and MAPK activation in HIF-1 $\alpha$  overexpressed MKN74 cell.**



- (A) Effect of IDF-11774 (15 and 30  $\mu$ M) on viability of MKN74 after HIF-1 $\alpha$  overexpression.
- (B) Effect of IDF-11774 (15 and 30  $\mu$ M) on viability of MKN74 after HIF-1 $\alpha$  overexpression (n = 3). Cell viability is monitored for 3 days using a CellTiter-Glo luminescent assay (normalized to control wild-type cells at day 0; \*\*p < 0.01).
- (C) Effects of IDF-11774 (15 and 30  $\mu$ M) on colony formation in MKN74 after HIF-1 $\alpha$  overexpression (n = 3). MKN74 cells overexpressed with pcDNA3.0-hypoxia-inducible factor-1 alpha (HIF-1 $\alpha$ ) plasmid were cultured for 48 hours and stained with crystal violet to visualize and count the colonies (\*\*p < 0.001).
- (D) MKN74 which was transfected with pcDNA3.0-HIF-1 $\alpha$  plasmid are treated with IDF-11774 30  $\mu$ M for 4 hours and then lysed and immunoblotted with HIF-1 $\alpha$ , cell cycle arrest-associated proteins (Cyclin B1, D1, and E1), and  $\beta$ -actin.
- (E) MKN74 which was transfected with pcDNA3.0-HIF-1 $\alpha$  plasmid are treated with IDF-11774 30  $\mu$ M for 4 hours and then lysed and immunoblotted with HIF-1 $\alpha$ , apoptosis-associated proteins (poly-ADP ribose polymerase, cleaved caspase-3), and  $\beta$ -actin.
- (F) MKN45 which was transfected with pcDNA3.0-HIF-1 $\alpha$  plasmid are treated with IDF-11774 30  $\mu$ M for 4 hours and then lysed and immunoblotted with HIF-1 $\alpha$ , mitogen-activated protein kinase

pathway proteins (phos-pho-extracellular signal-regulated protein kinases (ERK), ERK, phosphor-Jun N-terminal kinase (JNK), JNK, phosphor-p38, and p38), and  $\beta$ -a