Supplemental Figure S3





Supplemental Figure S3. NXT2 loss leads to loss of NXF1

A, KELLY-Cas9 cells were infected with doxycycline inducible sgRNAs as indicated (see methods). After 72 hours of 1 µg/mL doxycycline (Dox) cells were harvested and protein levels of NXF1, PARP, and GAPDH were assessed by western blot. B, Dose response curve of SK-N-FI cells with deletion of endogenous NXT1 and expression of an sgRNA resistant degron-tagged NXT1 (SK-N-FI-NXT1^{deg}) for dTAG-13 after 72 hours of treatment. Viability (relative to DMSO) is shown on the y-axis, and the log of the nM concentration of dTAG-13 is shown on the x-axis. Data points indicate the mean +/- stdev of replicates. C, SK-N-FI-NXT1^{deg} were treated with 500 nM dTAG-13 for the indicated number of hours (hrs) and PARP, NXF1, HA-NXT1, and GAPDH levels were assessed by western blot. D, Immunoprecipitations were performed using antibodies targeting mouse and rabbit IgG, NXF1 (mouse) and HA (rabbit) six hours after DMSO or 500 nM dTAG13 treatment, as indicated, in the SK-N-BE(2)-NXT1^{deg} cell line. NXF1 and HA levels are shown detecting endogenous NXF1 and HA-tagged NXT1 respectively. Input lysate is shown to the left with NXF1, HA, and GAPDH. E, Quantitative RT-PCR for was performed after indicated number of hours of 500 nM dTAG-13 treatment in KELLY-NXT1^{deg} cells. Mean of three biological replicates +/- stdev of relative NXF1:GAPDH expression is shown on the y-axis, with all samples normalized to the 0 hour sample. * indicates p< 0.05 and n.s. indicates not significant in a twoway ANOVA with Dunnett's multiple comparisons test. F, Quantitative RT-PCR was performed after indicated number of hours of 500 nM dTAG-13 treatment in SK-N-BE(2)-NXT1^{deg} cells. Mean of three biological replicates +/- stdev of relative NXF1:GAPDH expression is shown on the y-axis, with all samples normalized to the 0 hour sample. * indicates p< 0.05 and n.s. indicates not significant in a two-way ANOVA with Dunnett's multiple comparisons test. G, KELLY-NXT^{deg} cells were treated with 50 µg/mL cycloheximide plus DMSO or 500 nM dTAG-13 as indicated. Cells were lysed the indicated amount of time after treatment, and the western blot depicts NXF1,

MYCN, HA-NXT1, and vinculin levels. MYCN is a short half-life protein used as a control for cycloheximide treatment.