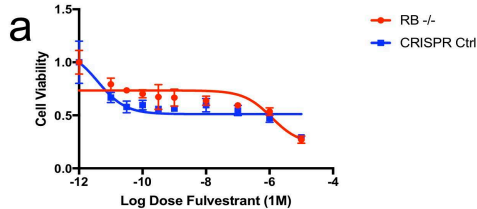


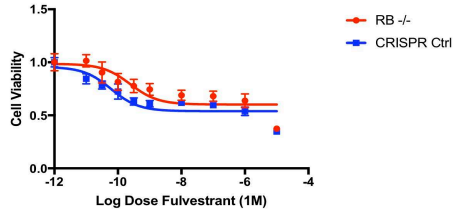
Fulvestrant Treatment

T47D RB -/-

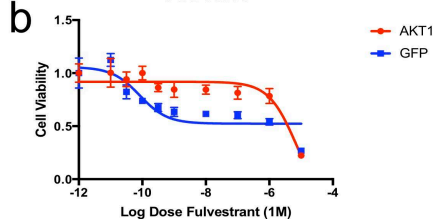


Fulvestrant Treatment

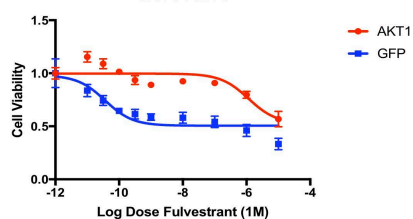
MCF7 RB -/-



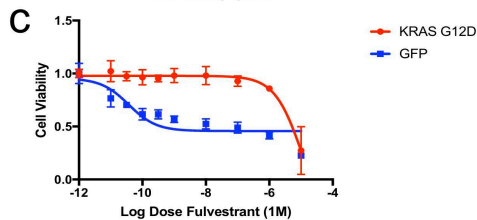
T47D AKT1



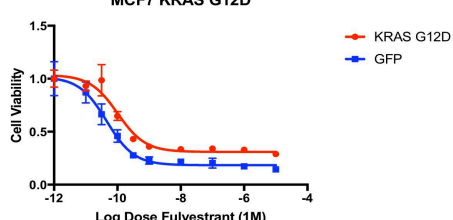
MCF7 AKT1



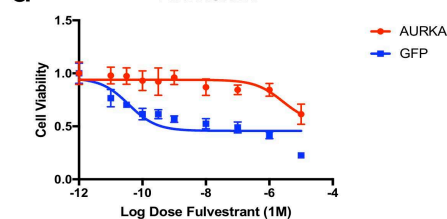
T47D KRAS G12D



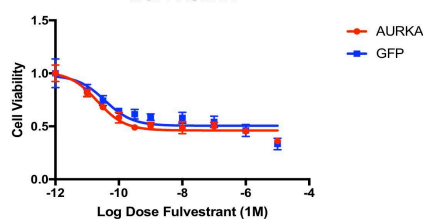
MCF7 KRAS G12D



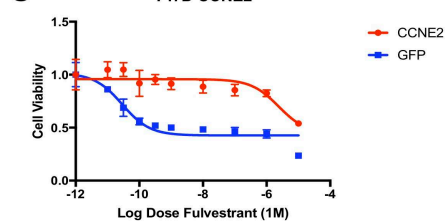
T47D AURKA



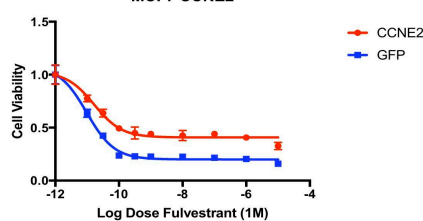
MCF7 AURKA



T47D CCNE2



MCF7 CCNE2



Supplemental Figure 7. Candidate alterations provoke variable anti-estrogen resistance *in vitro*.

Cell lines modified to reflect potential resistance drivers (per Figure 4 and Supplemental Figure 6; T47D – left, MCF7 - right) were exposed to escalating doses of fulvestrant (a – e). Drug response was assessed via cell-titer-glo (CTG) assay. Control (CRISPR non-targeting guide, GFP) cells are plotted along with the resistance driver of interest (RB1 – a, AKT1 – b, KRAS G12D – c, AURKA – d, CCNE2 – e). Parental and variant cell lines are normalized to vehicle control and viability is plotted as a function of increasing CDK4/6i (graphed as triplicate average +/- standard deviation). AKT1 and CCNE2 provoke fulvestrant resistance *in vitro* in both T47D and MCF7 cells. RB1 provokes minimal fulvestrant resistance in both T47D and MCF7. KRAS G12D and AURKA provoke significant fulvestrant resistance in T47D; KRAS G12D provokes minimal resistance in MCF7, while AURKA does not convey any resistance in MCF7. Corresponding IC50 values are included in Supplemental Table 7.