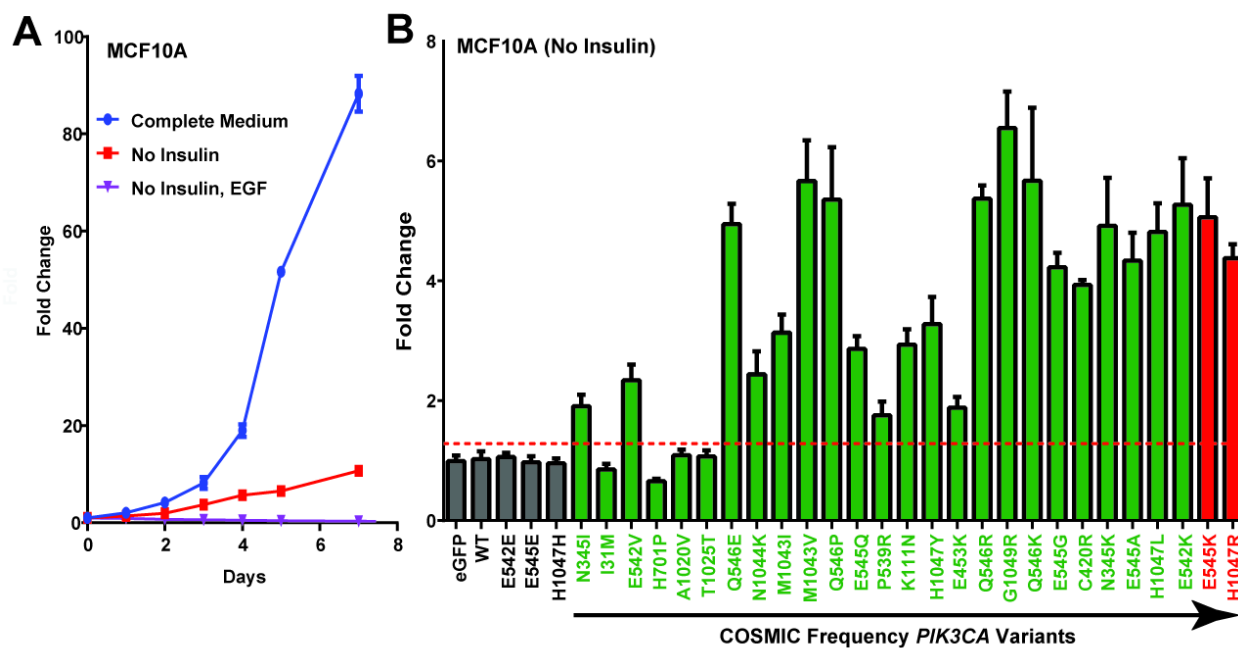
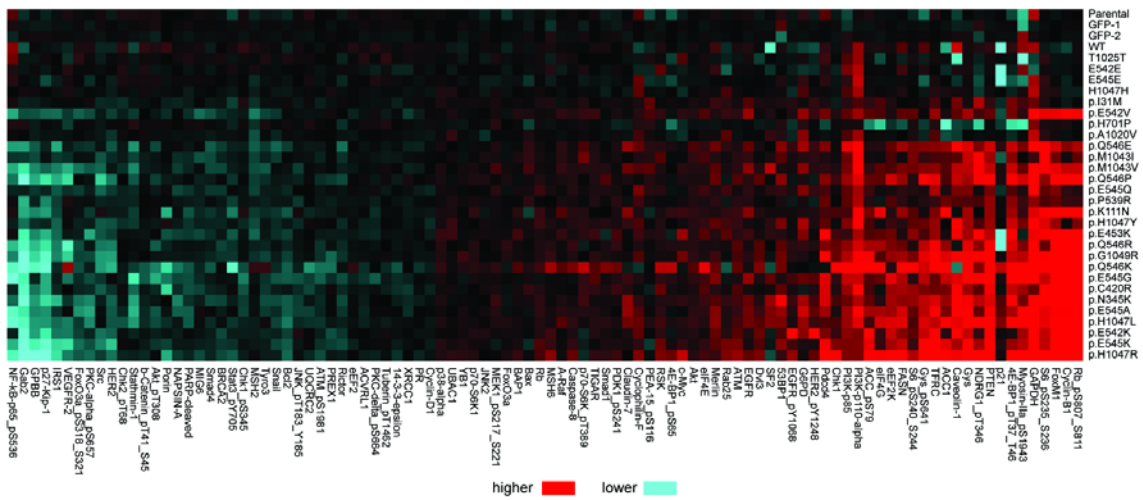


## Supplementary Figure 1



**Figure S1. (A)** Growth curve for parental MCF10A cells propagated in the presence or absence of growth factors insulin and EGF. Data normalized to Day 0 values **(B)** MCF10A cell lines expressing the expanded series of negative controls (gray), rare (green) and hotspot (red) *PIK3CA* variants assessed for cell growth in the presence of EGF and absence of insulin. Data normalized to the mean of the negative controls. Dashed line = significance limit set as value equal to 3x standard deviations of negative control values. Error bars depict the standard deviation.

## Supplementary Figure 2



**Figure S2. RPPA analysis.** Heat-map of significant protein level changes (p < 0.05) from RPPA analysis of lysates from MCF10A cells expressing oncogenic *PIK3CA* mutations cultured without growth factors. Control cells include parental cells and cells expressing eGFP, wild-type *PIK3CA* and *PIK3CA* with silent mutations.