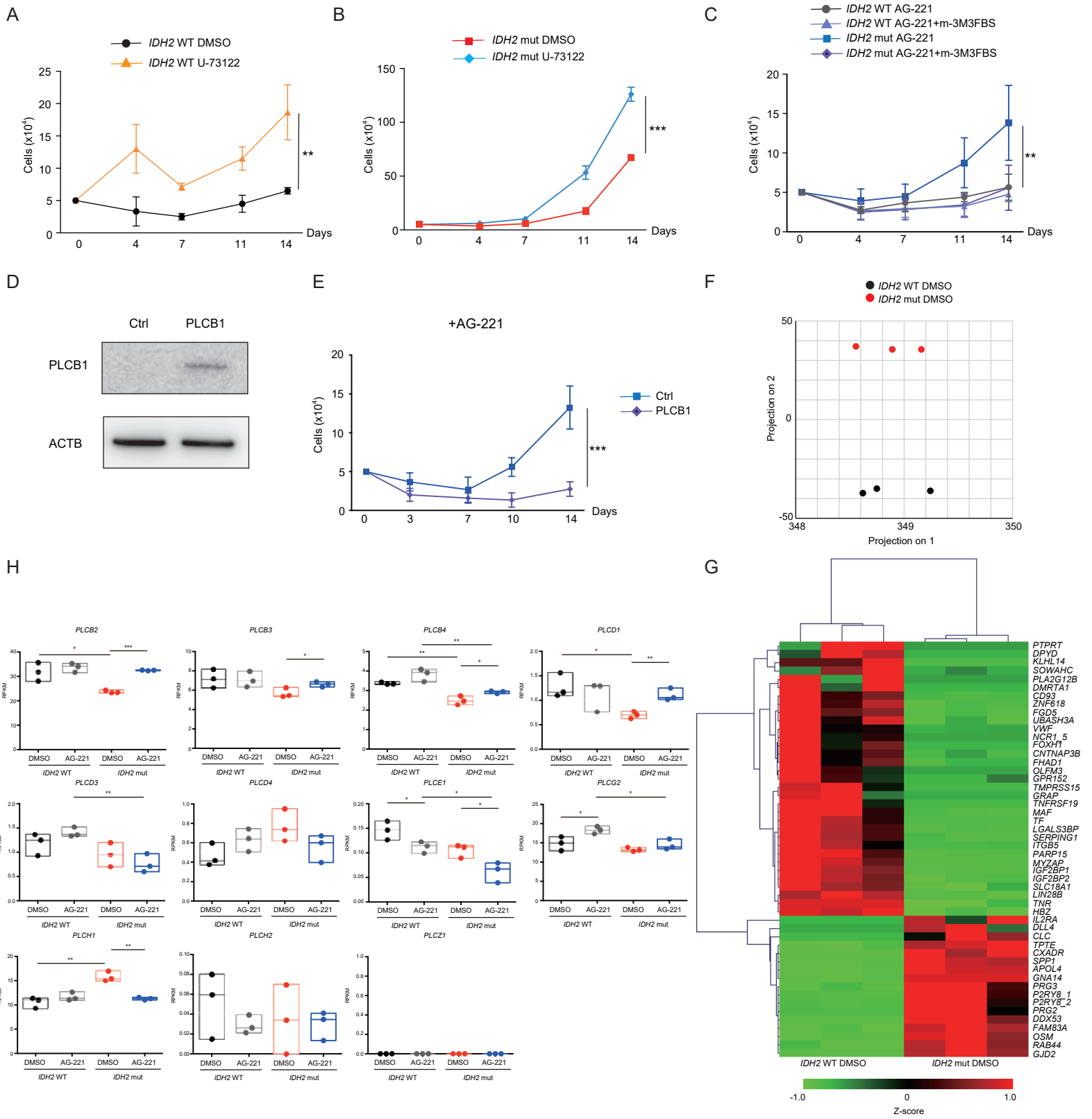


# Supplemental Figure-2



**Supplemental Figure 2. The downregulation of phospholipase C expression contributed to the growth advantage in AG-221-treated *IDH2* mut AML cells**

(A-B) Live cell number of *IDH2* WT (A) and *IDH2* mut (B) TF-1 cells cultured in cytokine-free medium and treated without (DMSO) or with PLC specific inhibitor (U-73122) *in vitro* (n=3). (C) Live cell number of *IDH2* WT or *IDH2* mut TF-1 cells cultured in cytokine free condition treated with AG-221 and PLC specific activator (*m*-3M3FBS) at the indicated combinations *in vitro* (n=6 from 2 independent experiments). (D) Western blot images of PLCB1 protein in control or *PLCB1*-overexpressed *IDH2* mut TF-1 cells. ACTB was used as a loading control. (E) Live cell number of control or *PLCB1*-overexpressed *IDH2* mut TF-1 cells treated with AG-221 in cytokine-free condition *in vitro* (n=6). (F) Principal component analysis (PCA) plot of RNA sequencing analysis in *IDH2* WT and *IDH2* mut TF-1 cell lines. (G) Heatmap of top 50 differentially-expressed genes between *IDH2* WT and *IDH2* mut TF-1 cells. Color code represents relative expression levels indicated as a Z-score in the scale below. (n=3,  $p < 0.01$ ). (H) mRNA expression level of *PLC* genes in *IDH2* WT and *IDH2* mut TF-1 cells treated without (DMSO) or with AG-221 for 10 days. Expression level was represented in RPKM. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$  (two-tailed *t*-test).