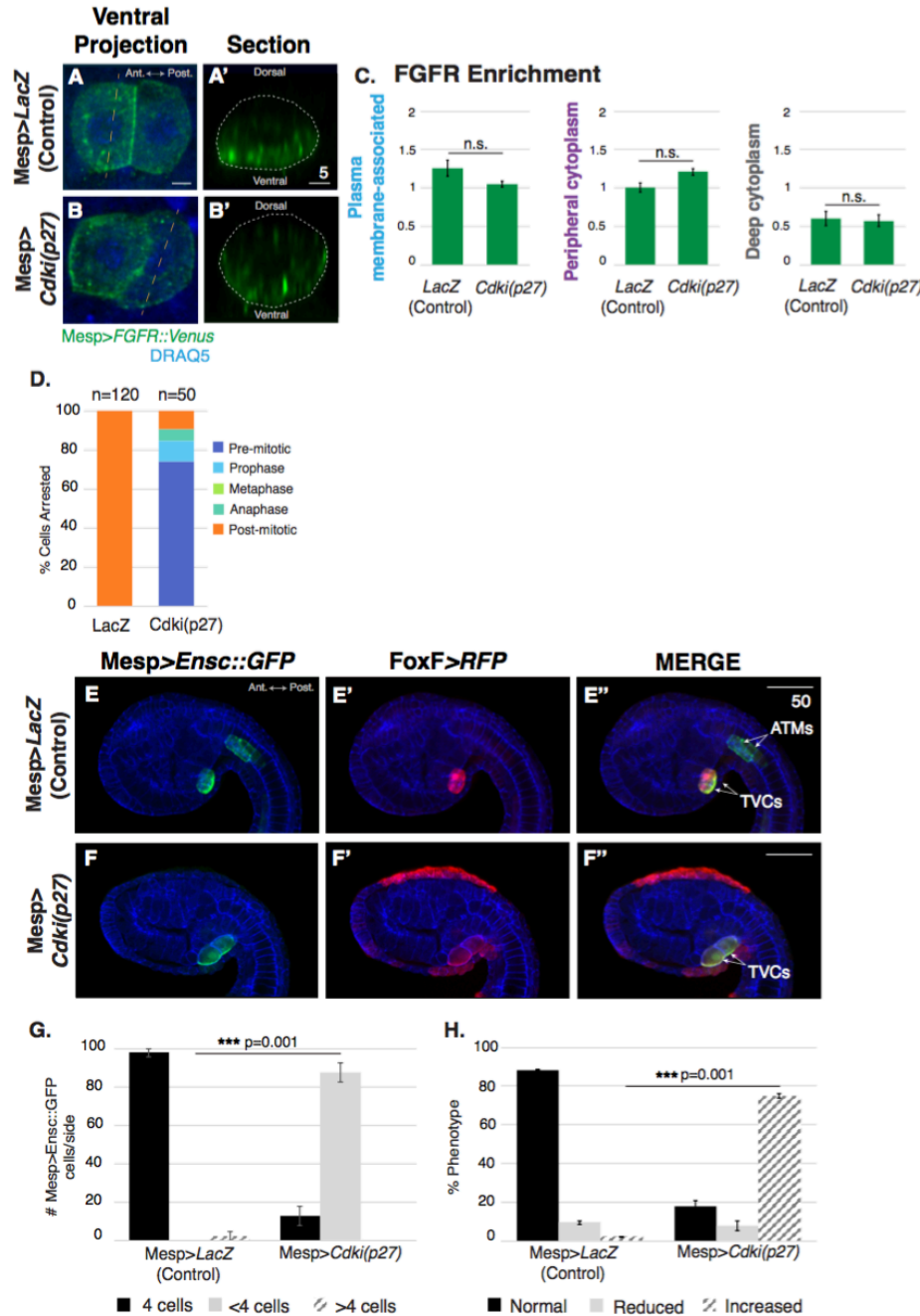


S1 Fig. Inhibition of mitotic entry suppresses FGFR mitotic trafficking but does not impact TVC induction (Related to Fig 1). (A-B') Ventral projections and lateral sections for founder cells electroporated as indicated. Dashed lines (A&B; orange) indicate position of sections (A'&B'). (C) Graphical summary of regional FGFR::VENUS enrichment for founder cells electroporated as indicated. No significant changes in regional FGFR::VENUS enrichment were detected in arrested *Mesp>Cdk1(p27)* transgenic founder cells (plasma membrane-associated $p=0.489$, peripheral cytoplasm $p=0.527$, deep cytoplasm $p=0.899$). Data were obtained from 2 independent trials, $n>16$. (D) Graphical summary of mitotic arrest at different stages as observed for founder cells electroporated with either *Mesp>LacZ* or *Mesp>Cdk1(p27)* as indicated. Data were obtained from 3 independent trials, $n>13$ per trial. (E-F'') Representative micrographs of late tailbud embryos showing cranial-cardiac progenitor induction



(indicated by overlapping *Mesp>Encsc::GFP* and *FoxF>RFP* reporter expression) versus non-induced pre-cardiac founder lineage cells (indicated by *Mesp>Encsc::GFP* reporter expression alone) in embryos co-electroporated with either *Mesp>LacZ* or *Mesp>Cdk1(p27)* as indicated [20,40,41,21]. ATM=Anterior Tail Muscle Cell, TVC = cranial-cardiac progenitor/trunk ventral cell. (G-H) Graphical summary of mitotic arrest and heart progenitor induction in embryos co-transfected as indicated. Data were obtained from 3 independent trials, $n>17$ per trial. Scale bars are indicated in micrometers. Significance indicated; n.s.= not significant. Significance was determined using one-way ANOVA followed by Tukey's multiple comparison test. Error bars represent S.E.M. Numerical values for all graphs can be found in S6 Data.