Supplemental Figure 1. Nuclear Id2 in luminal and myoepithelial cells in response to hormone treatment. Immunofluorescent staining for Id2 was performed on mammary gland sections from the mice used in Fig. 4A. Representative confocal images of Id2 staining (green) merged with smooth muscle actin staining (red) and TOPRO stained nuclei (blue) are shown. White arrows show nuclear Id2 in myoepithelial cells. Optical slice = $0.5 \mu m$. Scale bar = $15 \mu m$.



Supplementary Figure 2. Top panel: Overlay images of cyclin D1 (green) and DAPIstained nuclei (blue) from E+P treated Stat5a+/+ and Stat5a-/- mice. Note the strong nuclear cyclin D1 staining present in the Stat5a+/+ and Stat5a-/- #10 (white arrows). Bottom panel: p21 (green) and overlay images of p21 and DAPI-stained nuclei (blue). Note the exclusion of p21 from the nuclei in Stat5a+/+ and Stat5a-/- #10 (green arrows). Scale bar = $20 \mu m$.

