

Figure W1. Mammary epithelial cells in benign lesions of WAP-Cre *Brca1^{fl/fl}* *Wap^{neo/neo}* females lack expression of active Stat3. Immunostaining of tyrosine phosphorylated Stat3 in epithelial cells (A) and adjacent fibrous stromal cells (B) of the same hyperplastic lesion of a multiparous female. Arrows in panel A indicate few isolated epithelial cells with active Stat3. Mammary tissue from a female 48 hours after weaning the pups (C) served as a positive control. (D) Matching section of panel C, without the primary antibody against Stat3 (negative control). The slides were counterstained with hematoxylin. Bar, 50 μ m.

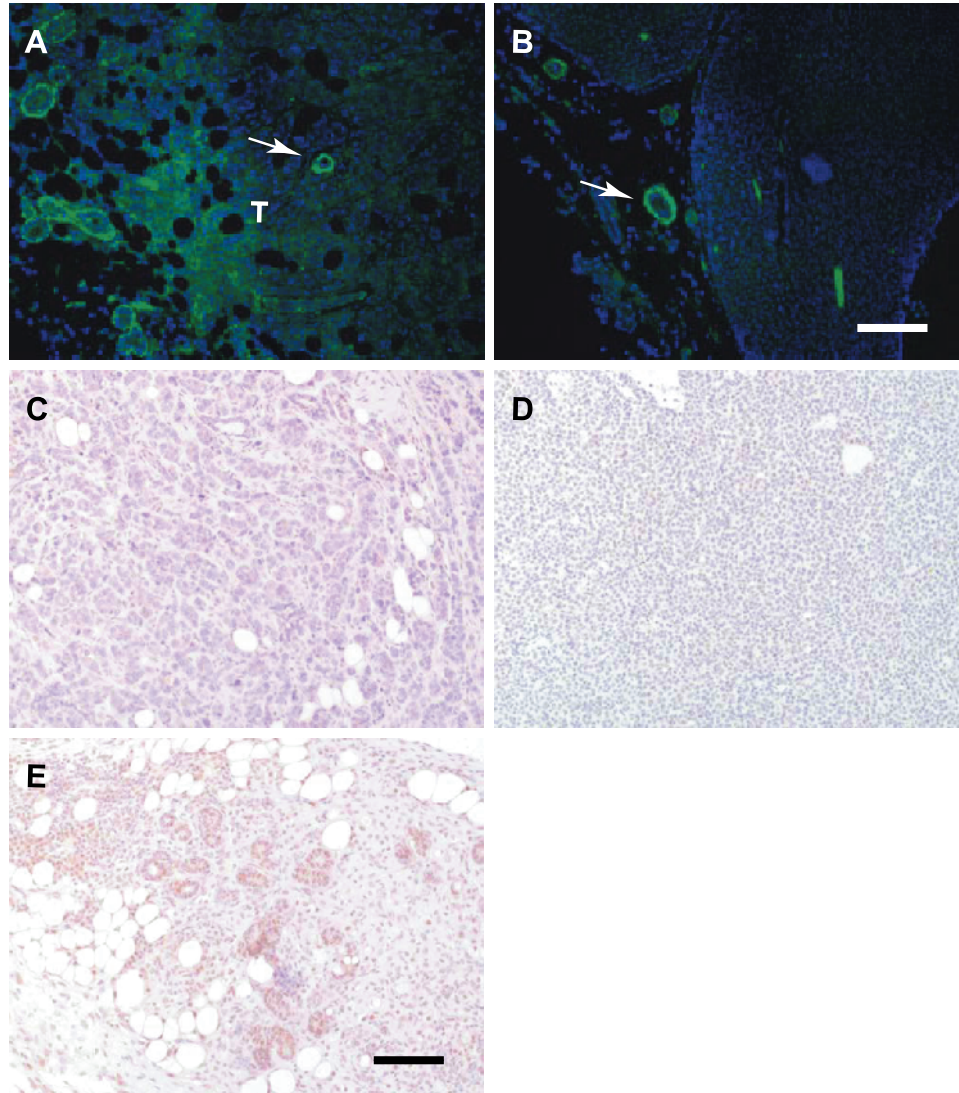


Figure W2. Mammary cancers that are deficient in *Brca1* and haploinsufficient in chromosome 11 are of basal epithelial origin and lack expression of estrogen receptor alpha ($ER\alpha$). Immunofluorescence staining of SMA using an Alexa Fluor 488–conjugated secondary antibody (green) in a mammary cancer from an MMTV-Cre *Brca1*^{fl/fl} *Wap*^{wt/neo} female (A) and *Her2/neu*–overexpressing control (B). The slides were counterstained with DAPI (blue). Arrows in panels A and B indicate the positive staining of SMA in normal mammary epithelial cells adjacent to the primary neoplasm. Bar, 100 μ m. (C–E) Immunostaining of $ER\alpha$ in mammary tumors from an MMTV-Cre *Brca1*^{fl/fl} *Wap*^{wt/neo} female (C), a *Her2/neu*–overexpressing mouse as an $ER\alpha$ –negative control (D), and a WAP-Cre *Brca1*^{fl/fl} *Wap*^{neo/neo} female (E). The slides were counterstained with hematoxylin. Bar, 100 μ m.

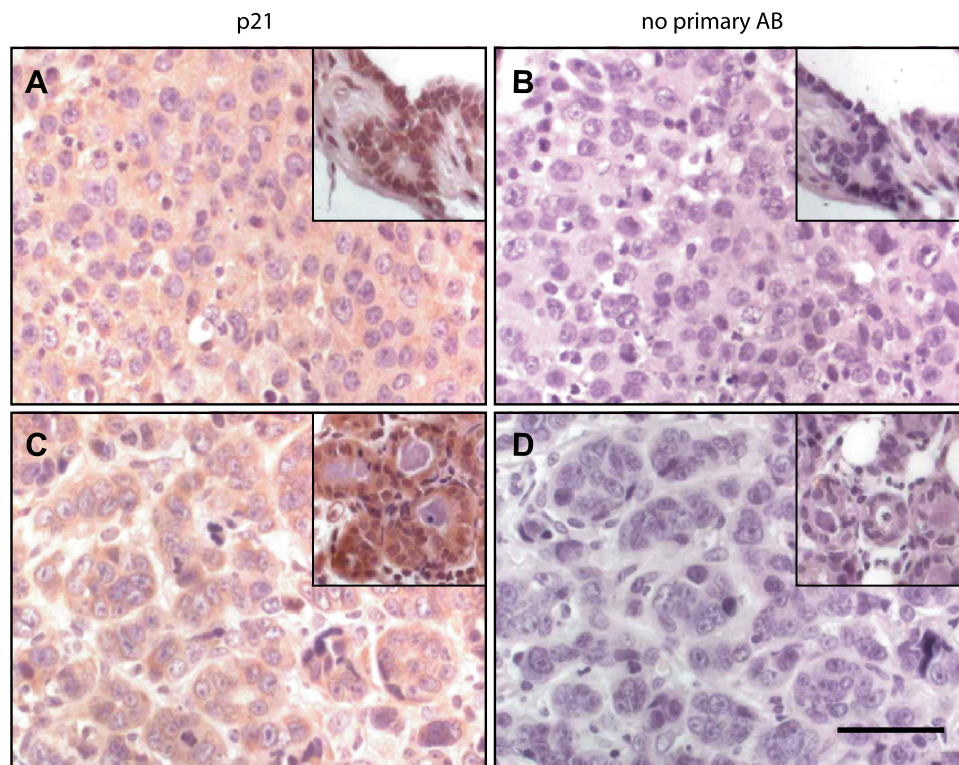


Figure W3. Brca1-deficient mammary cancers that are haploinsufficient in chromosome 11 lack nuclear expression of p21^{Cip}. Immunostaining of p21 (A, C) as well as their corresponding controls without primary antibody (B, D) in neoplastic epithelial cells of tumor 11704 (A, B) and tumor 10725 (C, D). Insets show normal epithelial tissues adjacent to the primary tumor of the same histologic section. The slides were counterstained with hematoxylin. Bar, 50 μ m.