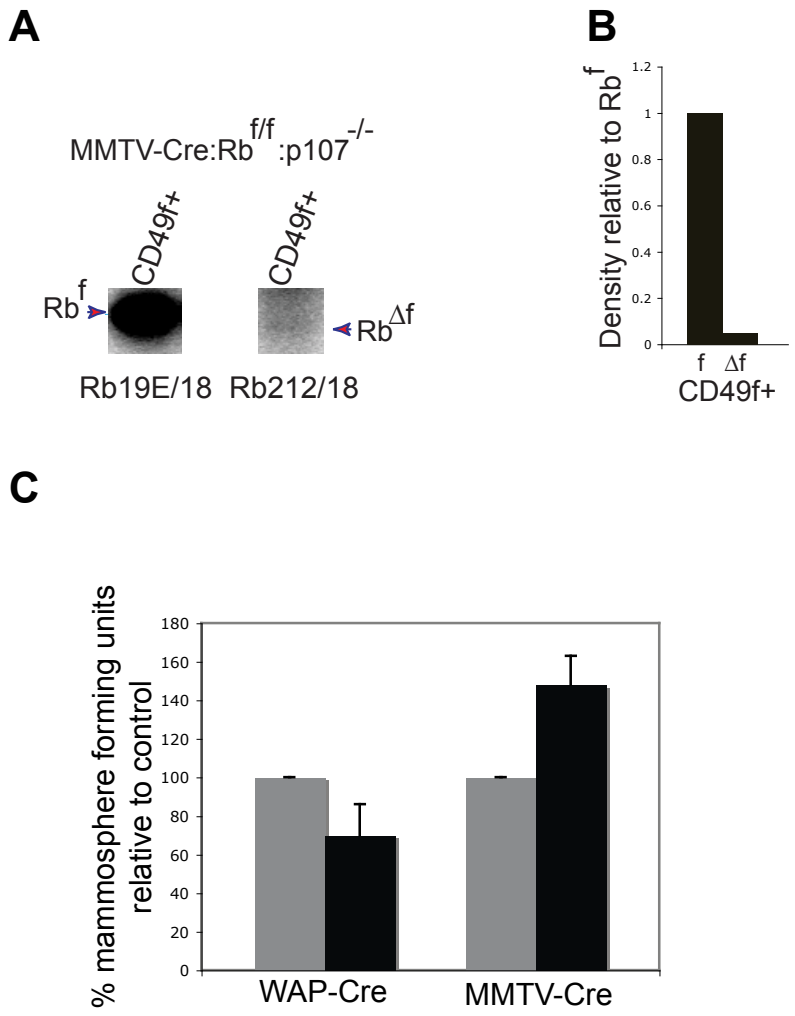

Figure S1 (**A-B**) Detection of low level of Rb deletion in the CD49f+ cell fraction from MMTV-Cre:Rbf/f:p107-/- mice. (A) DNA samples from the CD49f+ PCR reaction were subjected to a second PCR amplification (30 cycles); a faint recombined RbΔf band is now observed. (B) Densitometry analysis of RbΔf and Rbf PCR fragments in panel A. (**C**) Percentage of mammosphere forming units in Lin- mammary epithelial cells from pooled MMTV-Cre:Rbf/f:p107-/- and WAP-Cre:Rbf/f:p107-/- mammary glands relative to control Rbf/f:p107-/- mice (n=2).

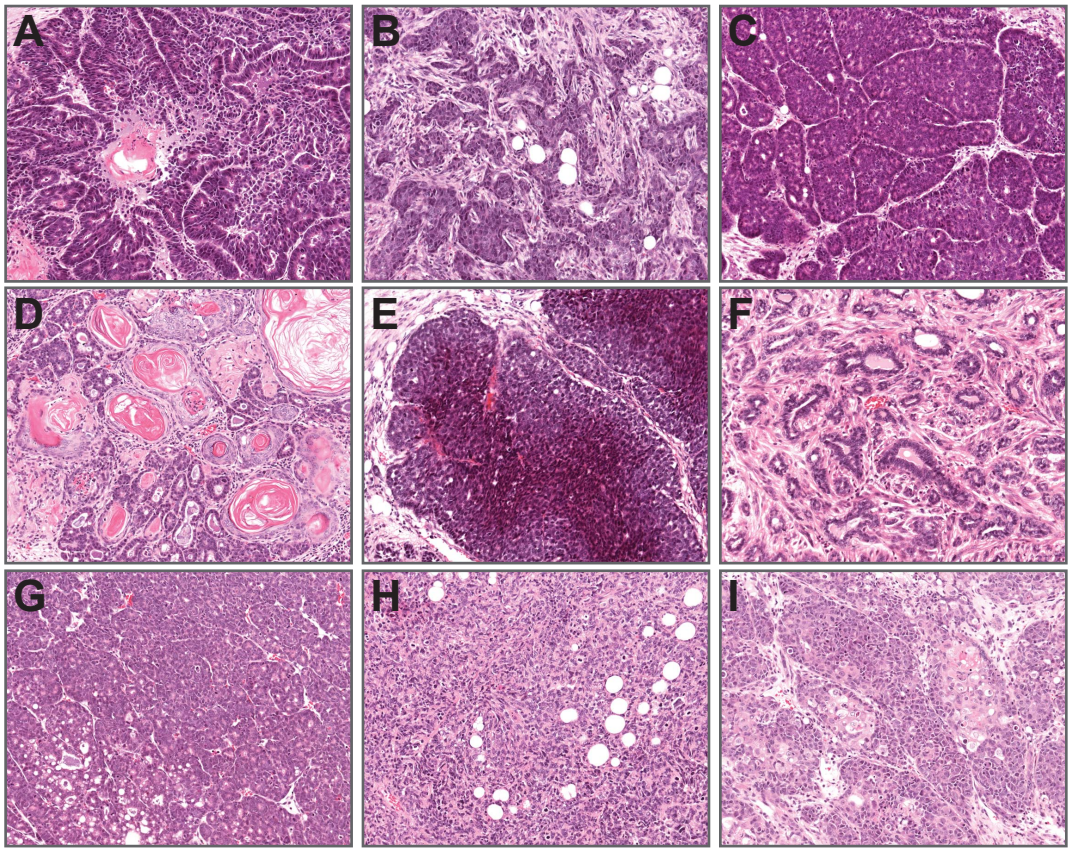

Figure S2 Heterogeneous histology RbΔf deficient mammary tumors. (**A**) Tumor #1: Keratoacanthoma with prominent glands but with squamous metaplasia. (**B**) Tumor #3: Poorly differentiated adenocarcinoma with scirrhous pattern and cellular stroma that resembles human breast cancer. (**C**) Tumor #5: Microacinar pattern (Type A of Dunn). (**D**) Tumor #8: Keratoacanthoma with glandular area and squamous metaplasia. The concentric rings of keratin resemble hair ("pilar"). (**E**) Tumor #10: Solid nodular tumors that show the general pattern of human ErbB2-type adenocarcinoma. Note the peripheral palisade, the zonation and the central compact cell mass**. (F**) Tumor #11: papillary adenomyoepitheliomas. (**G**) Tumor #12: Microacinar Type A tumor of Dunn. (**H**) Tumor #13. Undifferentiated tumor mass of unknown origin. The tumor cells are invading the fat. (**I**) Tumor #14: Poorly differentiated tumor with areas of squamous metaplasia, classified as keratoacanthoma. Original magnification, 200X.

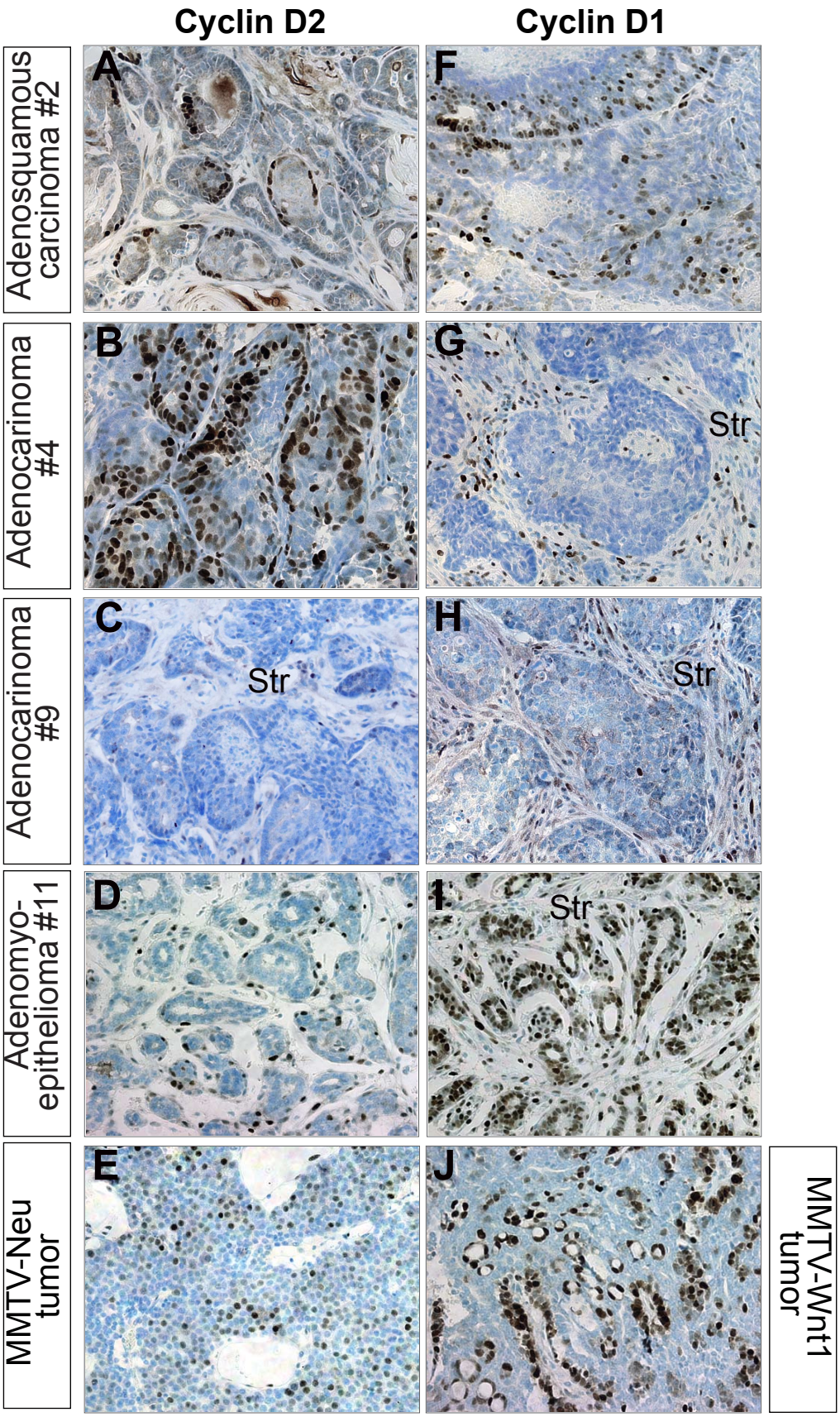

Figure S3 Expression of Cyclin D2 and Cyclin D1 in indicated RbΔf mammary tumors. Mammary tumors from MMTV-Neu and MMTV-Wnt1 mice served as positive controls. (**A-E**) IHC analysis for Cyclin D2. (**F-J**) IHC staining for Cyclin D1. Note that Cyclin D1 is expressed mainly in stroma but not in tumor epithelium in tumors #4 and #9.
Str, stroma Magnification 400X.

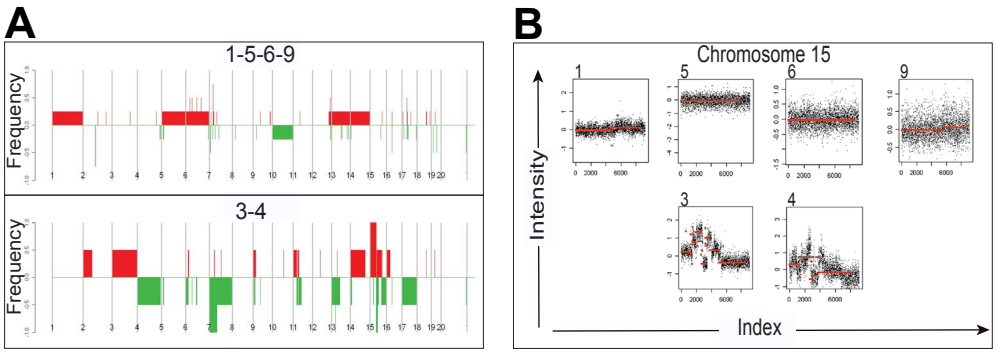

Figure S4 Increased chromosomal gains/losses in RbΔf basal-like tumors detected by aCGH. (**A**) Array CGH frequency plot of luminal-B like RbΔf tumors #1, #5, #6, #9 (top) and basal-like #3 #4 (bottom) showing total gains (red) and losses (green) across the indicated samples. (**B**) aCGH data for chromosome 15 in the indicated mammary tumors. Note the relative high level of gains/losses in RbΔf basal-like tumors #3 and #4 relative to the luminal-B like tumors #1, #5, #6 and #9. RbΔf tumors #2, #11 and #10 also exhibited relatively low gains/losses with no major rearrangements on chromosome 15 (not shown).

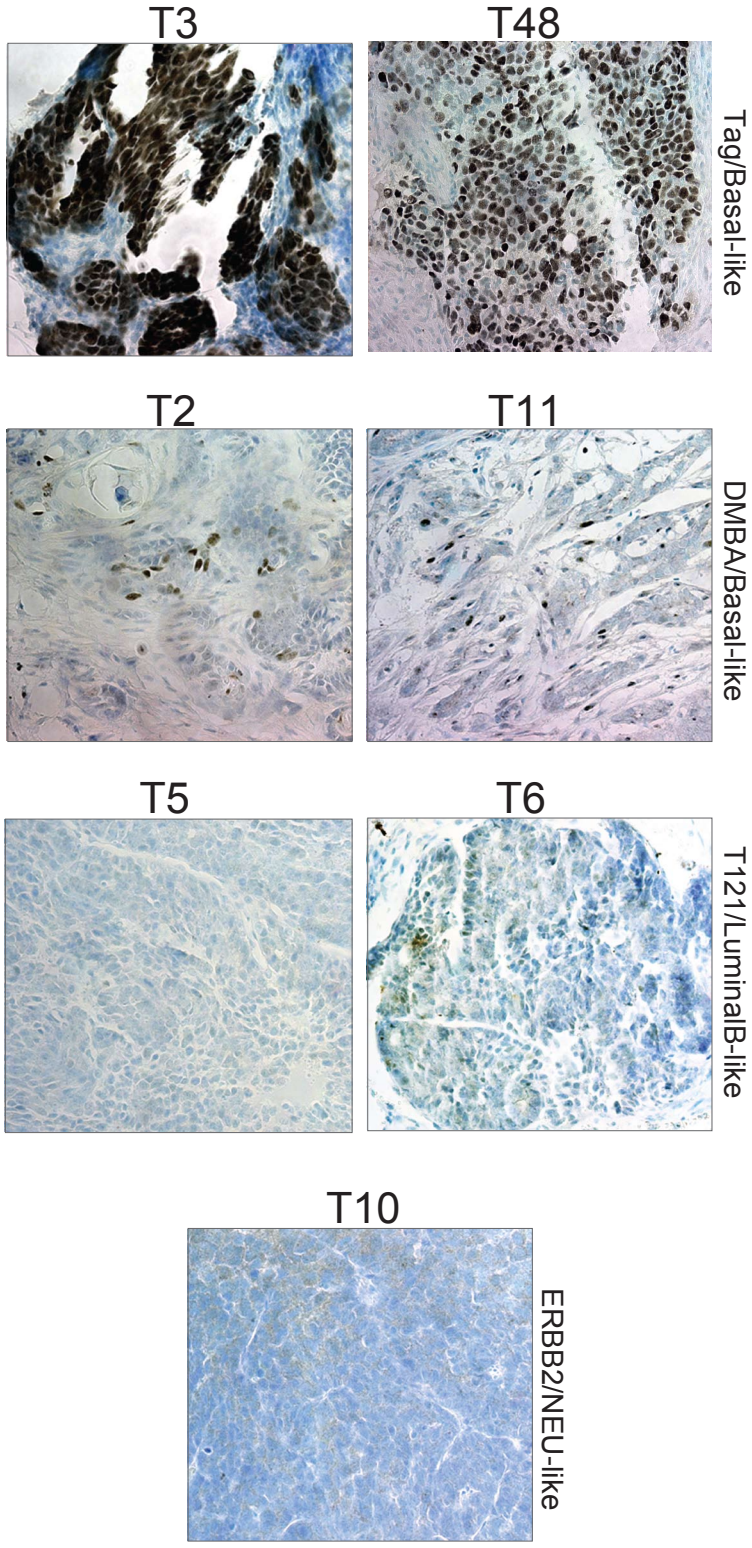

Figure S5 IHC analysis for p53 expression in indicated RbΔf mammary tumors. Note nuclear p53 expression in nearly all cells in RbΔf tumors #3 and #48, intermediate expression in DMBA/basal-like tumors (#2, #11), and undetectable expression in luminalB-like (#5, #6) and ERBB2/NEU-like (#10) tumors. Magnification, 400X.