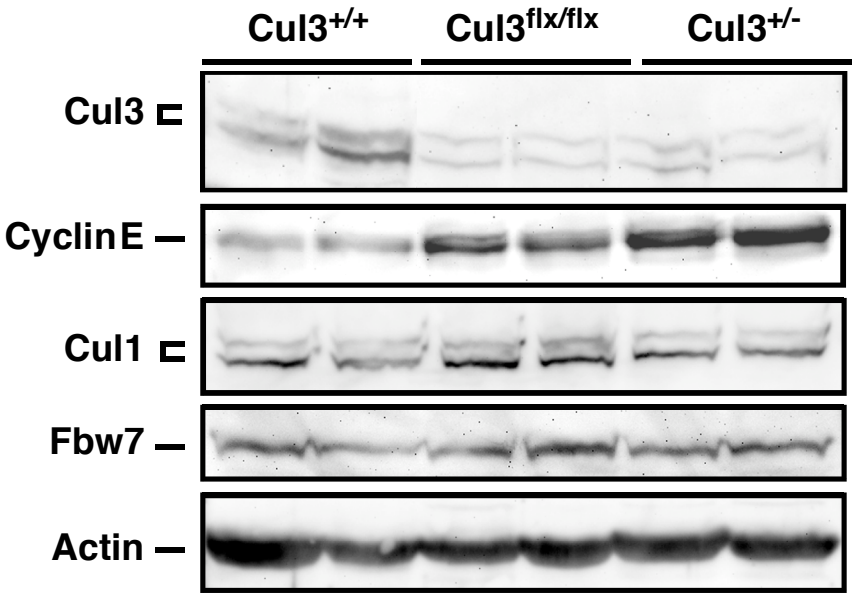
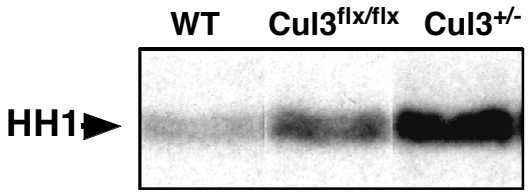


FIG. S1. Cul1 ligase steady state levels do not change in cells with low Cul3 expression. Immunoblot of endogenous Cul3 (1st panel), cyclin E (2nd panel) Cul1 (3rd panel) and Fbw7 (4th panel) in $Cul3^{+/+}$, $Cul3^{flx/flx}$, and $Cul3^{+/-}$ MEFs. Immunoblot for actin is used as a loading control (5th panel).

A.



B.

	0μm Roscovitine			25μm Roscovitine		
Genotype	**Total Number**	**Total BrdU (+)**	**S-phase**	**Total Number**	**Total BrdU (+)**	**S-phase**
$Cul3^{+/+}$	**1384**	**139**	**10%**	**397**	**6**	**1.5%**
$Cul3^{flx/flx}$	**1285**	**209**	**16%**	**281**	**5**	**1.8%**
$Cul3^{+/-}$	**4557**	**1117**	**25%**	**849**	**18**	**2.1%**

FIG. S2. Cul3 hypomorphs have excess cyclin E/Cdk2 kinase activity. (A) Histone H1 (HH1) was used as a substrate to monitor cyclin E directed Cdk2 kinase activity. An image of the relative phosphorylation of Histone H1 is shown: left lane-wild type cells, center lane-$Cul3^{flx/flx}$ and right lane-$Cul3^{+/-}$. Equal cell numbers were used in these experiments; all cells are the same passage (p2) and are in log phase. This gel shows a representative experiment, similar data was obtained in three replicates. (B) Cells were treated with roscovitine and the percentage of cells in S-phase was determined by measuring BrdU incorporation. Roscovitine dramatically reduced the levels of S-phase cells in all three genotypes.