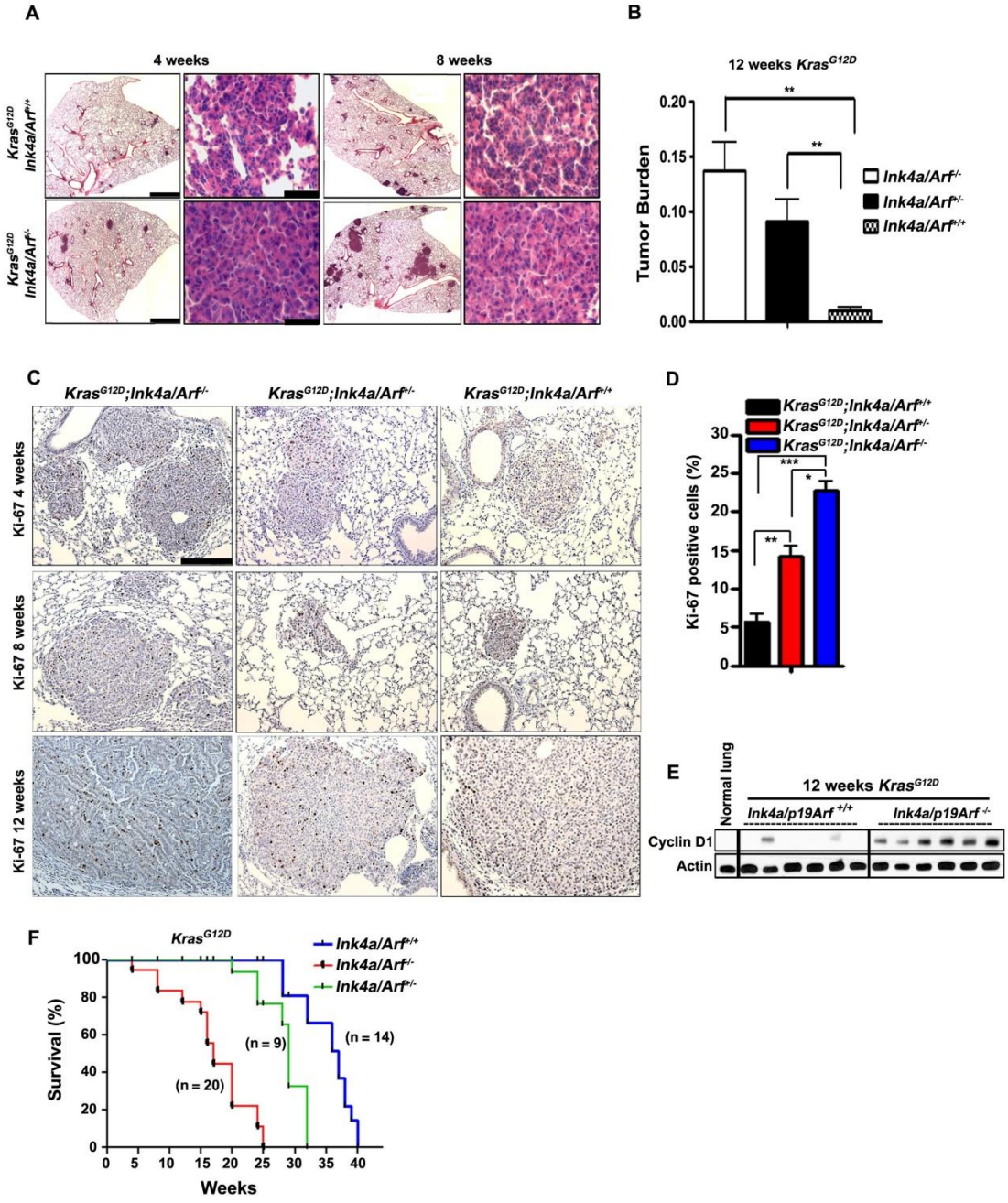

Supplementary Figure S1. Deficiency of the *Cdkn2a* locus promotes Kras^{G12D}-induced lung tumorigenesis and results in decreased survival. (A) Representative Hematoxylin and Eosin (H&E) stained lung sections after 4 or 8 weeks of Kras^{G12D}

induction with doxycycline. Low magnification scale bars: 1 mm; high magnification scale bars: 40 μm. **(B)** Histogram shows lung tumor burden after 12 weeks of exposure to doxycycline. Mean ± s.e.m. ***P*<0.01. Genotypes are indicated; n=8/genotype. **(C)** Ki-67 IHC staining of lung sections after $Kras^{G12D}$ induction for the indicated length of time. Scale bar: 100 μm. **(D)** The histogram reports the percentage of Ki-67 positive cells from panel C. Mean ± s.e.m. **P*<0.05, ***P*<0.01, ****P*<0.001. A total of 200 cells were scored/slide for at least 3 replicates. **(E)** Immunoblot showing Cyclin D1 expression after 12 weeks of $Kras^{G12D}$ induction for the indicated genotypes. Each lane represents a lysate from a single mouse. **(F)** Kaplan-Meier curve of $Kras^{G12D}$*;Ink4a/Arf* $^{+/+}$, $Kras^{G12D}$*;Ink4a/Arf* $^{+/-}$ and $Kras^{G12D}$*;Ink4a/Arf* $^{-/-}$ mice after exposure to doxycycline for the indicated amount of time. Genotypes and number of mice per group are indicated.