

SUPPLEMENTAL MATERIAL

Moore et al., <http://dx.doi.org/10.1084/jem.20160378>

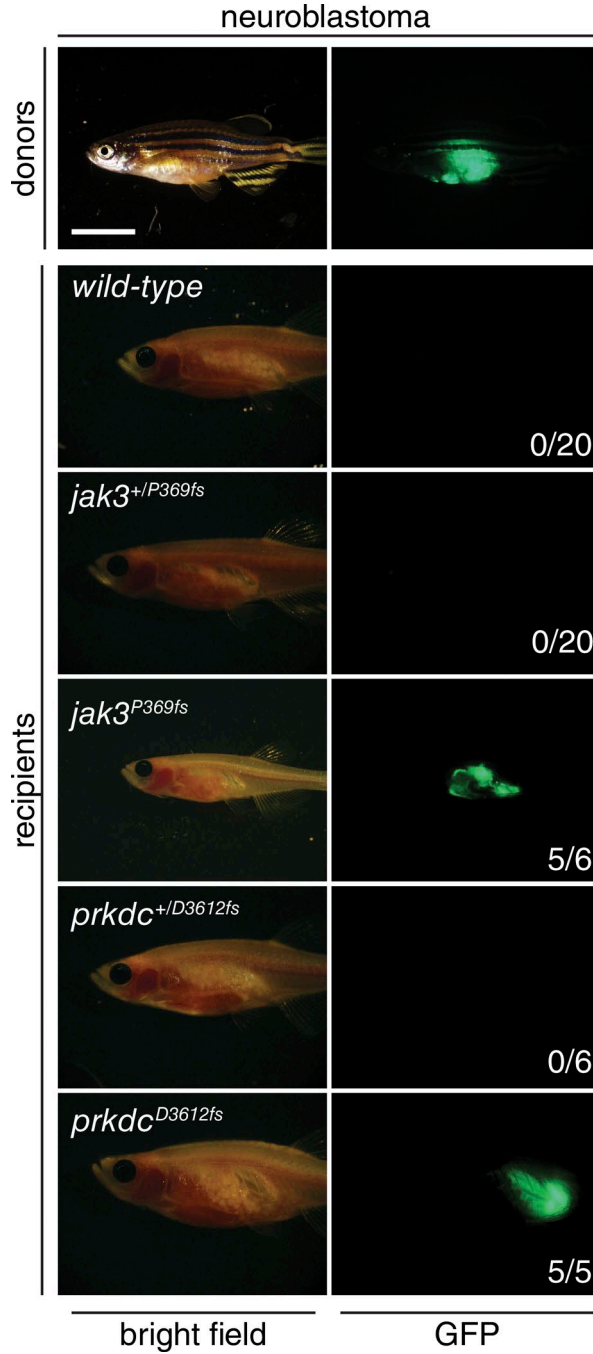


Figure S1. **Immune-deficient zebrafish engraft fluorescent-labeled neuroblastoma.** Brightfield (left) and fluorescence (right) images of donor with a neuroblastoma derived from *Tg(dβh:EGFP-MYCN; dβh:ALK^{F1174L})* transgenic background (top two panels), and images of recipient zebrafish (bottom; genotypes indicated) at 30 dpt. Number of animals with positive engraftment is shown in the bottom right corner of images. Bar, 1 cm.

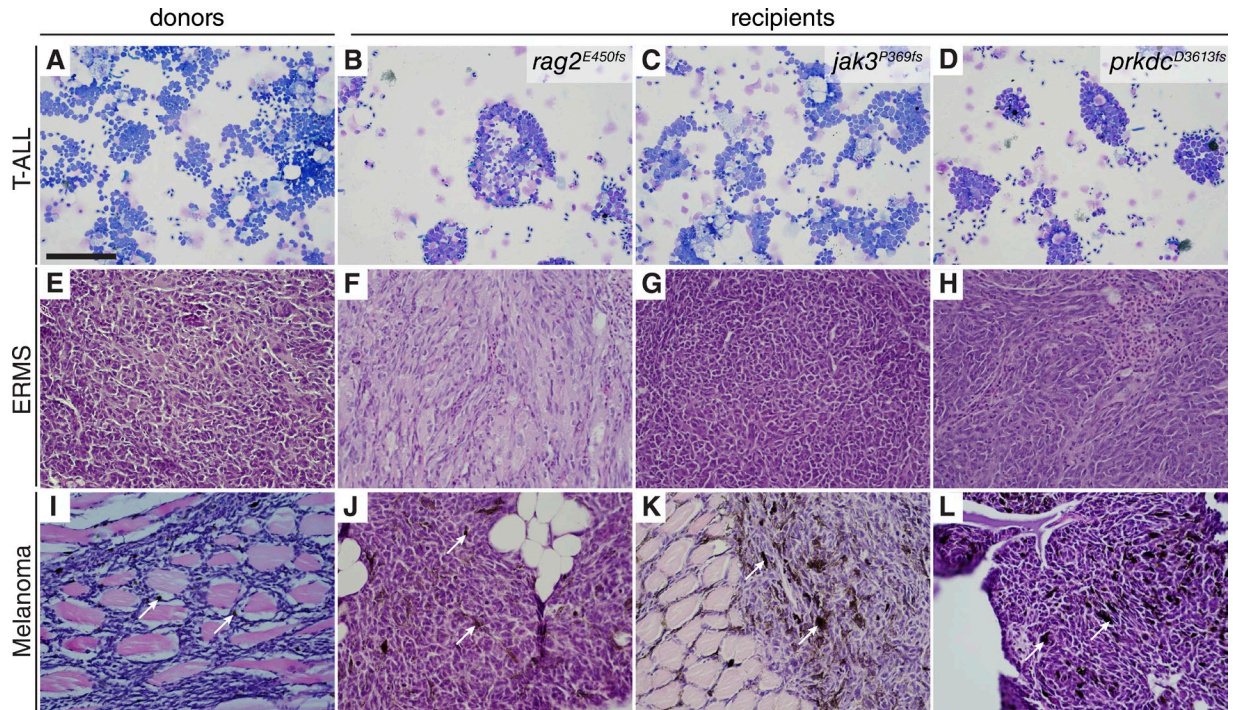


Figure S2. **Histology of tumors engrafted in immune-deficient zebrafish.** (A–D) Cytospin of T-ALL from donors and engrafted fish. (E–H) hematoxylin and eosin–stained sections of ERMS and (I–L) *BRAF*^{V600E}–induced melanoma. Arrows denote pigmented melanoma cells. Bar, 100 μ m. D, H, and L are expanded images of those shown in Fig. 3, G, J, and M, respectively

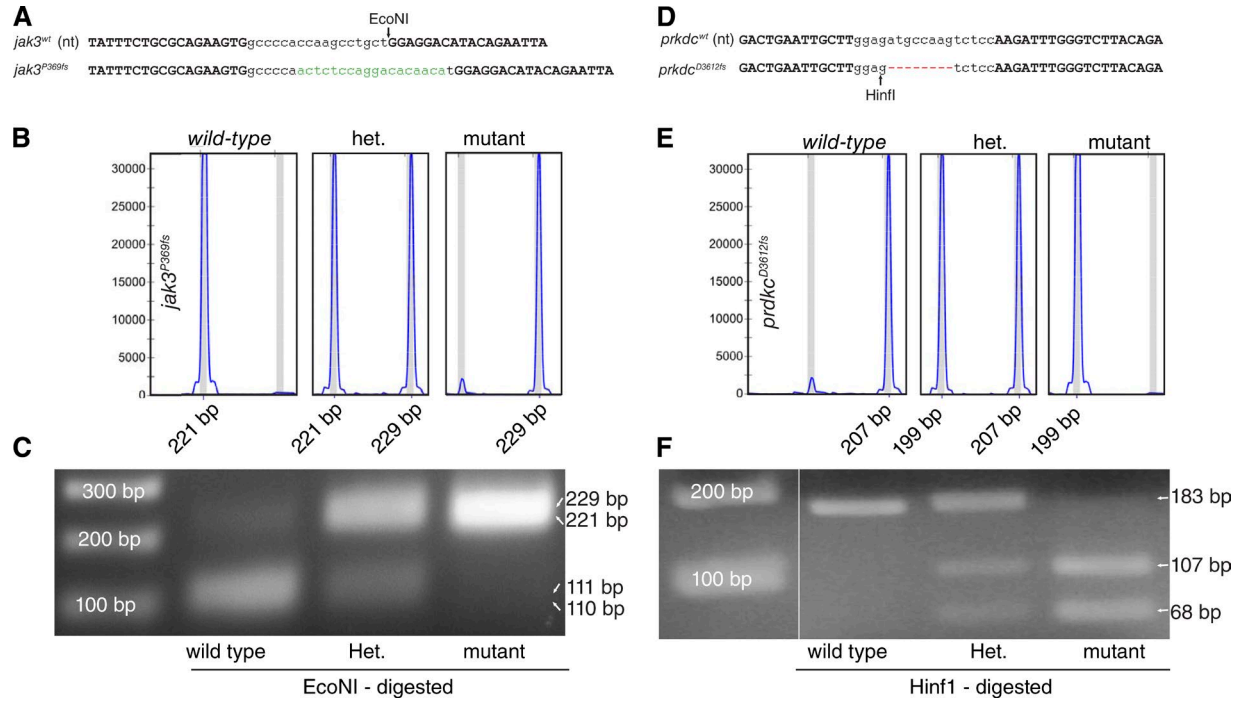


Figure S3. **Genotyping *jak3*^{P369fs} and *prkdc*^{D3612fs} mutant zebrafish.** Genomic lesions with additions (green) and deletions (red), resulting in unique restriction enzyme digestion sites noted for *jak3*^{P369fs} (A–C) and *prkdc*^{D3612fs} (D–F). (B and E) ABI 3730xl DNA Analyzer histograms shown for wild-type, heterozygous, and mutant *jak3*^{P369fs} (B) and *prkdc*^{D3612fs} (E) zebrafish. (C and F) Images of agarose gel electrophoresis of genomic amplification and restriction enzyme digest patterns of *jak3*^{P369fs} (C) and *prkdc*^{D3612fs} (F) zebrafish, delineating wild-type, heterozygous, and mutant genotypes.

Tables S1–S8 are available as Excel files.

Table S1 lists genes down-regulated in mutant whole kidney marrow compared with wild-type by RNA-Seq.

Table S2 lists gene expression signatures that are deregulated in the marrow of *prkdc*^{D3612fs} mutant zebrafish.

Table S3 lists gene expression signatures that are deregulated in the marrow of *jak3*^{P369fs} mutant zebrafish.

Table S4 lists gene expression signatures that are deregulated in the marrow of *rag2*^{E450fs} mutant zebrafish.

Table S5 lists sequence analysis for Igh-V3 V(D)J recombined clones in wild-type and *prkdc*^{D3612fs} mutant zebrafish.

Table S6 lists results of allortransplantation into *rag2*^{E450fs}, *jak*^{P369fs}, and *prkdc*^{D3612fs} mutant zebrafish.

Table S7 lists results of xenotransplantation into *prkdc*^{D3612fs} mutant zebrafish.

Table S8 lists PCR primers.