



Figure S2: Generation of combined *casper scid* mutant.

Schematic representation of the generation of an *il2rga* (*scid*) mutant on the *casper* background. A. Transparent *casper* zebrafish, containing homozygote mutations (-/-) in *nacre* and *roy* but wild-type (+/+) for *il2rga*, were crossed with heterozygote (+/-) *il2rga*^{wt/mdu2} mutants, which were wild-type with respect to *nacre* and *roy*. Progeny were all heterozygous for *nacre* and *roy*, with those being *il2rga*^{+/-} identified by genotyping of fin clip-derived genomic DNA using RFLP analysis with *Nde*I, with representative images of undigested (uncut) and digested (cut) PCR products from *il2rga*^{+/+} and *il2rga*^{+/-} fish. B. Transparent *casper* fish were then crossed with fish heterozygous for *nacre*, *roy* and *il2rga*. Progeny were visually inspected for total lack of pigmentation to identify homozygote *nacre* and *roy* fish, which were genotyped to identify *il2rga*^{+/-} fish. C. These were then in-crossed, and progeny genotyped to identify *il2rga*^{-/-} (*scid*) mutants on the *casper* background. D. This *casper scid* line was subsequently maintained by in-crossing.