

**Table S1. Hematologic parameters of B6.Cg *an/+* × 129/Sv *Cdk5rap2*<sup>*RRO242*</sup> animals**

Genotype	WBC ( $\times 10^3$ /ml)	RBC ( $\times 10^6$ /ml)	HGB (g/dl)	HCT (%)	MCV (fl)	PLT ( $\times 10^6$ /ml)	RETIC (%)	CHr (pg)
<i>+/+</i>	5.47 $\pm$ 1.38*	9.05 $\pm$ 0.15*	14.9 $\pm$ 0.4*	46.7 $\pm$ 1.8*	51.6 $\pm$ 2.6*	1158 $\pm$ 158	2.65 $\pm$ 0.42*	16.7 $\pm$ 0.3*
<i>an/+</i>	4.47 $\pm$ 1.42*	8.80 $\pm$ 6.65*	14.5 $\pm$ 0.9*	45.6 $\pm$ 1.9*	52.0 $\pm$ 2.6*	1127 $\pm$ 105*	3.39 $\pm$ 0.41*	16.6 $\pm$ 0.4*
<i>RRO242/+</i>	2.62 $\pm$ 0.89	9.11 $\pm$ 0.32*	15.4 $\pm$ 0.2*	50.7 $\pm$ 0.7*	55.7 $\pm$ 2.4*	1176 $\pm$ 111	2.47 $\pm$ 0.13*	17.2 $\pm$ 0.1*
<i>RRO242/an</i>	1.67 $\pm$ 0.54	6.59 $\pm$ 0.45	12.9 $\pm$ 0.8	42.1 $\pm$ 1.7	64.0 $\pm$ 3.4	1300 $\pm$ 191	4.30 $\pm$ 0.80	19.7 $\pm$ 0.6

Complete blood counts obtained at 6 weeks of age from F1 animals in a cross segregating the *an* and an insertional gene-trap allele (designated *RRO242*, [http://www.genetrap.org/cgi-bin/annotation.py?gene\\_key=4934](http://www.genetrap.org/cgi-bin/annotation.py?gene_key=4934)). Homozygous wild-type (*+/+*, *n*=6), heterozygous *Hertwig's anemia* (*an/+*, *n*=9), heterozygous gene-trap *Cdk5rap2*<sup>*RRO242*</sup> (*RRO242/+*, *n*=3), and compound heterozygous mutant (*RRO242/an*, *n*=11) animals were examined. Values are presented as the mean  $\pm$  1 s.d.

WBC, white blood cells; RBC, red blood cells; HGB, hemoglobin; HCT, hematocrit; MCV, mean cell volume; PLT, platelets; RETIC, reticulocytes; CHr, mean cellular hemoglobin of the reticulocytes.

\*Denotes two-tailed Student's *t*-test statistical significance values (*P*<0.05) in comparison to the *Cdk5rap2*<sup>*RRO242/an*</sup> genotype.