

**Table S3. Quantification of anti-NeuN stained cells in brain cortex.**

	Genotype	Age	NeuN-positive cells*			Ratio to control
			Left	Right	Mean	
Cont	aPKC $\lambda$ flox/+	7 months	697	713	705	
S1-cko	aPKC $\lambda$ flox/-; S1-cre	7 months	703	703	703	0.997
Cont	aPKC $\lambda$ flox/+	18 months	735	699	717	
S1-cko	aPKC $\lambda$ flox/flox; S1-cre	18 months	658	717	687.5	0.959
Cont	aPKC $\lambda$ flox/+; C2-cre	15 months	766	666	716	
C2-cko	aPKC $\lambda$ flox/flox; C2-cre	15 months	736	643	689.5	0.963
Cont	aPKC $\lambda$ flox/+	26 months	738	737	737.5	
C2-cko	aPKC $\lambda$ flox/flox; C2-cre	26 months	735	749	742	1.006

\*Coronal sections of indicated control or aPKC $\lambda$  deletion mice were stained with anti-NeuN. The NeuN-positive cells in all layers of cortex (600  $\mu$ m in width) in left and right hemisphere were quantified. Mean cell number and ratio to control for each pair were also indicated.