

Supplementary Materials for

**Microglial GPR56 is the molecular target of maternal immune activation-induced parvalbumin-positive interneuron deficits**

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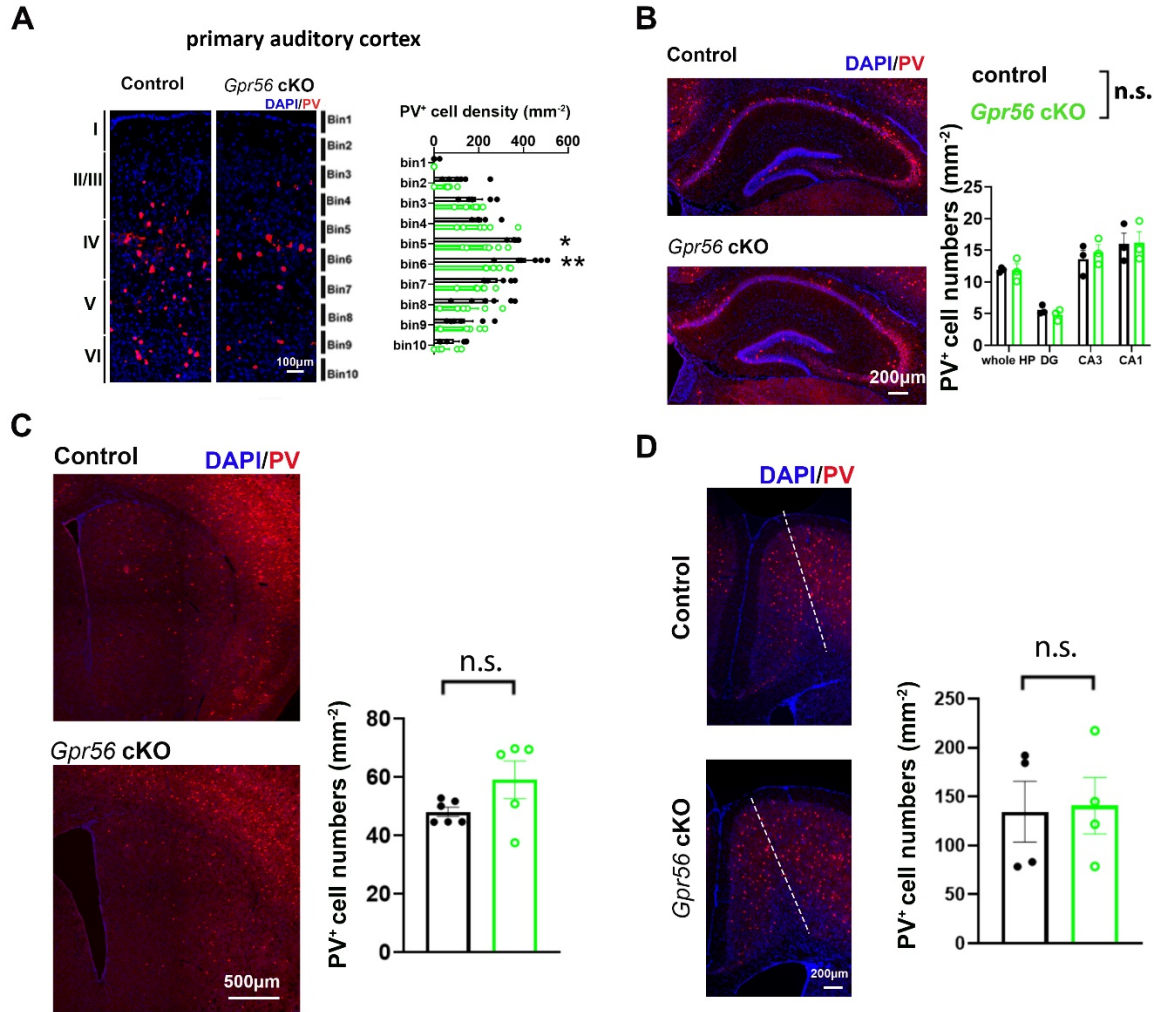
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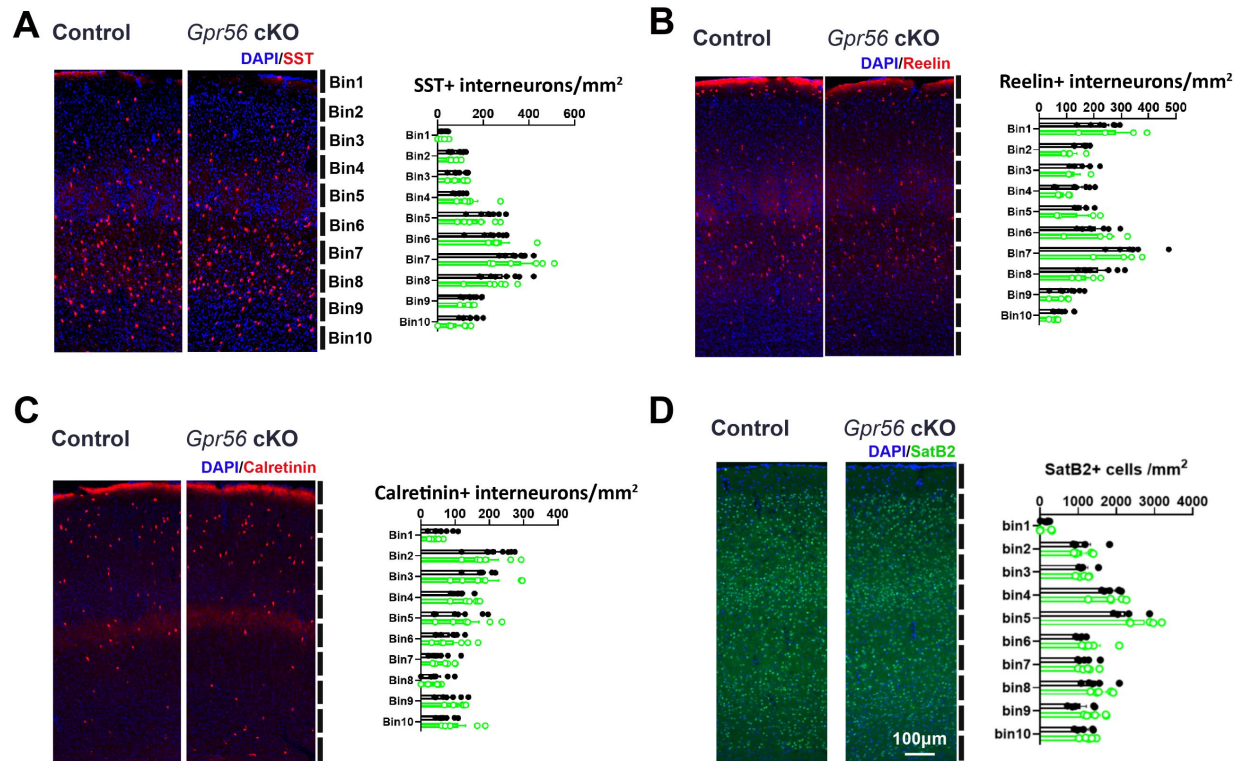
Figs. S1 to S3



**Fig. S1.**

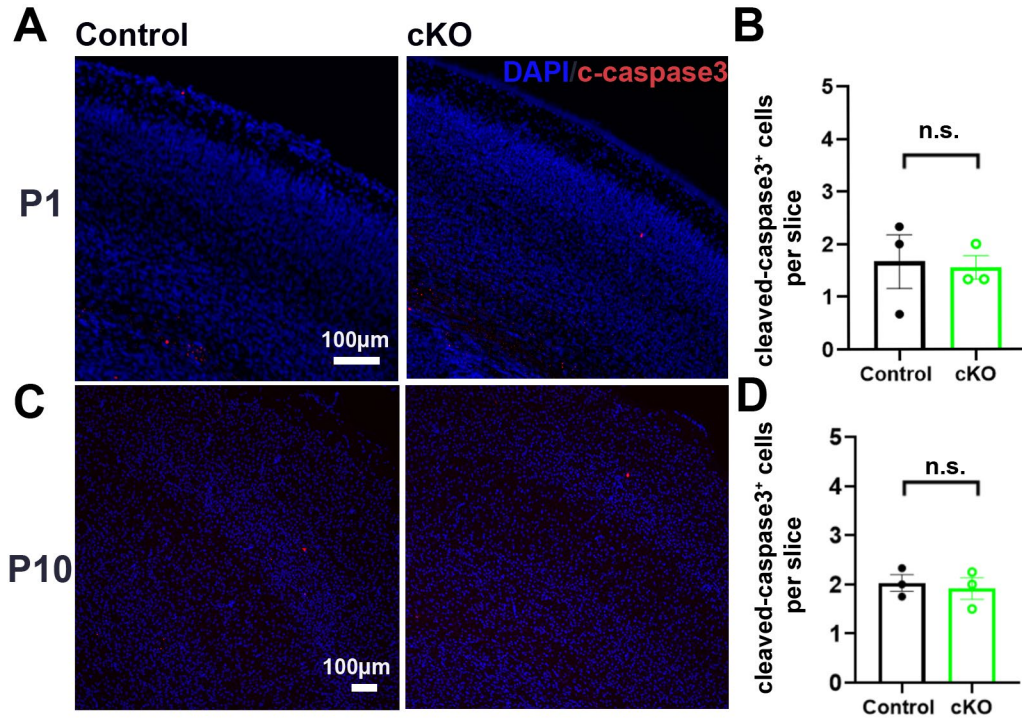
**PV<sup>+</sup> interneurons in various brain regions of controls and microglial *Gpr56* cKO mice at P21.**

(A) The density of PV<sup>+</sup> interneurons is decreased in the primary auditory cortex of *Gpr56* cKO mice (A, n=6). The densities of PV<sup>+</sup> interneurons in the hippocampus ((B), n=3), striatum ((C), n=6 in control and n=5 in cKO), and cingulate cortex ((D), n=4) are not significantly different between control and *Gpr56* cKO mice. Two-way repeated ANOVA and post-hoc Bonferroni's test in Fig. A; Unpaired t-test in Fig. B C D; P=0.98, 0.33, 0.57, 0.95 in the whole hippocampus (HP), dentate gyrus (DG), CA3, and CA1; P=0.14 in the striatum; P=0.89 in the cingulate cortex; n.s. not significant. \*P<0.05; \*\*P<0.01; data presented as mean ± SEM.



**Fig. S2.**

SST<sup>+</sup> interneurons (A), Reelin<sup>+</sup> interneurons (B), Calretinin<sup>+</sup> interneurons (C) in the SSC at 3 months old, and SatB2<sup>+</sup> excitatory neurons (D) in the SSC at P21 are not significantly different between controls and *Gpr56* cKO mice. Two-way repeated ANOVA and post-hoc Bonferroni's test; n=4-8; not significant; data presented as mean ± SEM.



**Fig. S3.**

**Cell apoptosis is not significantly different between controls and microglial *Gpr56* cKO mice in the SSC at P1 and P10.** (A) Representative images of cleaved-caspase 3 (c-caspase3) staining in the SSC of P1 mice. (B) The numbers of cleaved-caspase 3 signals in each slice at P1 are comparable between controls and *Gpr56* cKO mice ( $P=0.61$ ,  $n=3$ ). (C) Representative images of cleaved caspase-3 staining in the SSC of P10 mice. (D) The numbers of cleaved-caspase 3 signals in each slice at P10 are comparable between controls and *Gpr56* cKO mice ( $P=0.71$ ,  $n=3$ ). Unpaired t-test; not significant; data presented as mean  $\pm$  SEM.