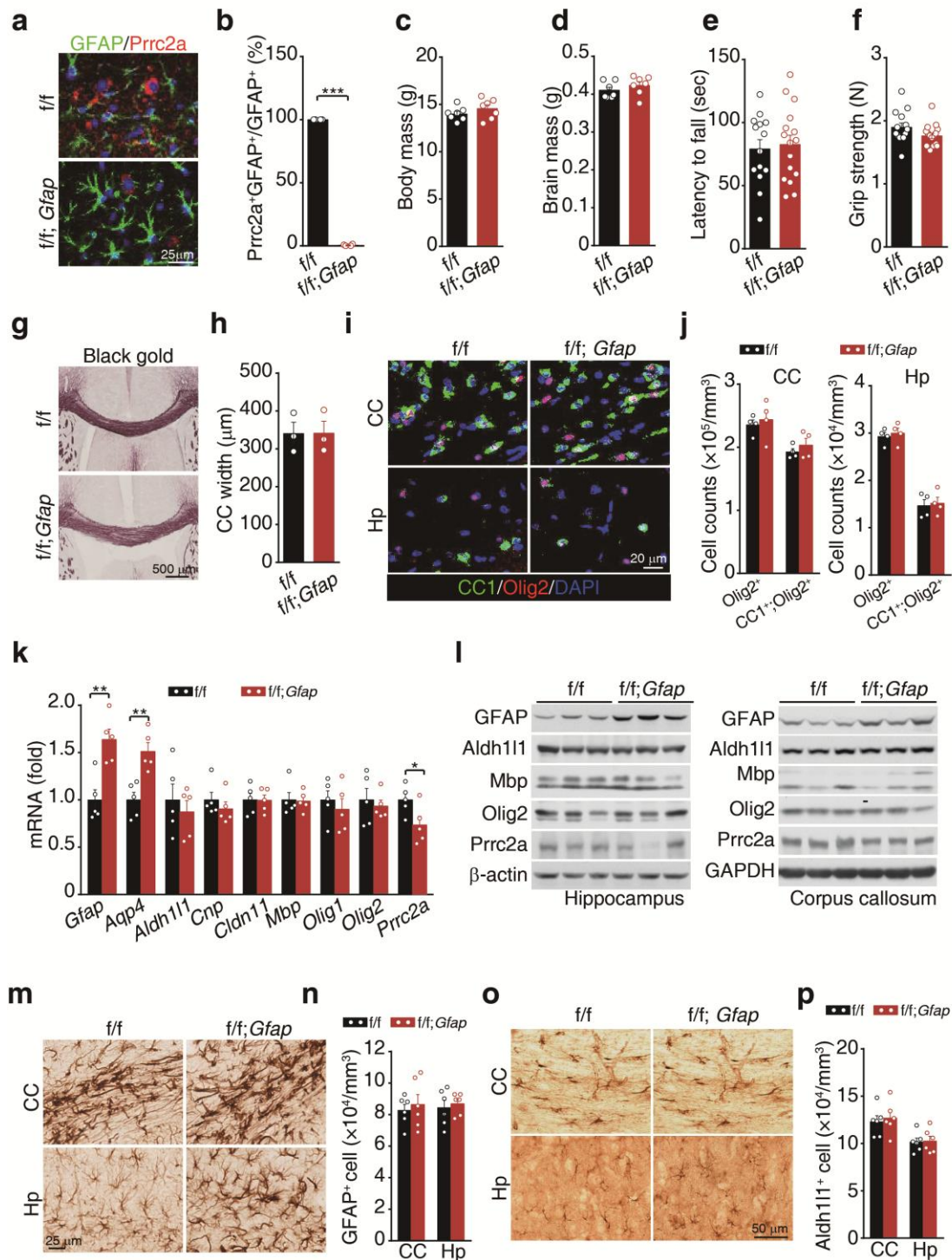


Figure S7



Supplementary Figure 7. Astrocytic Prrc2a deletion does not affect myelination.

(a) Prrc2a co-immunostained with astrocyte marker GFAP in hippocampus from 4-week-old

Prrc2a^{f/f}; Gfap^{Cre+/-} and control mice.

(b) The percentage of Prrc2a expression in GFAP positive cells (two-tailed unpaired Student's

194 *t*-test, *** $P < 0.001$, $n = 4$ per group).

195 (c, d) The body and whole wet brain mass of *Prrc2a^{ff};Gfap^{cre+/-}* and control mice at P28

196 (two-tailed unpaired Student's *t*-test, Body mass, $P = 0.2760$; Brain mass, $P = 0.3220$, $n = 7$ each

197 group).

198 (e) The latency of 3-month-old mice on the Rota-Rod. (two-tailed unpaired Student's *t*-test,

199 $P = 0.7399$; f/f, $n = 14$, f/f; *Gfap* $n = 16$).

200 (f) Grip strength analysis of 3-month-old mice with indicated genotypes (two-tailed unpaired

201 Student's *t*-test, $P = 0.0975$, f/f, $n = 14$, f/f; *Gfap* $n = 16$).

202 (g) Black gold staining of brain slices from 4-weeks-old *Prrc2a^{ff};Gfap^{cre+/-}* and control mice.

203 (h) The quantification of corpus callosum width at the midline (two-tailed unpaired

204 Student's *t*-test, $P = 0.9836$, $n = 3$ per group).

205 (i) Immunostaining of CC1/Olig2 or Sox10 in CC and Hp from 4-week-old mice with

206 indicated genotypes. The quantification of Olig2⁺, CC1⁺ Olig2⁺ or Sox10⁺ cells was shown in

207 (j) (two-tailed unpaired Student's *t*-test, Olig2⁺ cells in CC, $P = 0.6595$; CC1⁺ Olig2⁺ cells in

208 CC, $P = 0.4004$; Olig2⁺ cells in Hp, $P = 0.6393$; CC1⁺ Olig2⁺ cells in Hp, $P = 0.7911$; $n = 4$ per

209 group).

210 (k) Quantitative PCR analysis of the level of mRNA in isolated hippocampus of control and

211 *Prrc2a^{ff};Gfap^{cre+/-}* mice at 4 weeks old (two-tailed unpaired Student's *t*-test, * $P < 0.05$,

212 ** $P < 0.01$, $n = 5$ per group).

213 (l) Western blotting analysis of the protein expression using the indicated antibodies in

214 isolated hippocampus and corpus callosum from control and *Prrc2a^{ff};Gfap^{cre+/-}* mice at P28.

215 (m) Immunochemistry staining of GFAP in CC and Hp sections from indicated genotype mice

216 at P28. The quantification of GFAP positive cells was shown in (n) (two-tailed unpaired
217 Student's *t-test*, CC: $P=0.6321$; Hp: $P=0.6495$; $n = 6$ per group).

218 (o) Immunohistochemically staining of Aldh1l1 in CC and Hp sections from indicated
219 genotype mice at P28. The quantification of Aldh1l1 positive cells was shown in (p)
220 (two-tailed unpaired Student's *t-test*, CC: $P=0.6843$; Hp: $P=0.8719$; $n = 6$ per group).
221