



Supplementary Fig. 4. THP increases the input resistance of hippocampal pyramidal cells at the onset of puberty. (a) Current response to a 10 mV step (-50 to -40 mV), recorded from the soma with whole cell voltage clamp techniques before and after 30 nM THP in slices from pre-pubertal (Pre-pub) or pubertal (Pub) wild-type or $\delta^{-/-}$ mice. (b) Mean \pm SEM. THP increased the input resistance (R_m) at puberty, assessed from the current response to two 10 mV steps (-60 to -40 mV). This effect was prevented with pre-application of the GABA_A receptor blocker gabazine (120 μ M, Pub + GBZ) and was not seen in slices from $\delta^{-/-}$ mice, suggesting that the change in input resistance was mediated by δ -containing GABA_A receptors. In contrast, THP decreased input resistance, when assessed before puberty (Pre-pub). Similar steroid-induced increases in input resistance were produced after THP withdrawal (THP Wd). In addition, administration of replacement THP to prevent the decline in THP occurring at puberty (Pub + repl THP) prevented the steroid-induced change in input resistance. ($n = 8 - 10$ cells for each group, * $P < 0.05$ vs. pre-THP values; ** $P < 0.05$ vs. Pre-pub).