



**Supplementary Figure 3.** Midazolam 10 $\mu$ M inhibits firing of TMN neurons identified by the R- $\alpha$ -methylhistamine (RAMH) in mouse brain slices. Averaged time course diagrams show firing frequency normalized to the 7min control period (cell-attached voltage-clamp mode) in the presence of midazolam (upper plot) or the histamine 3 receptor agonist RAMH 2 $\mu$ M (lower plot) in WT and KI ( $\gamma$ 2F77I) mice. Note no difference in response to RAMH but faster recovery to control after midazolam withdrawal in KI mice.