



Additional Figure 2 Dose dependent inhibition of the GABA_A-ρ receptor.

Tg(1016tuba1a:gfp) zebrafish were intravitreally injected with either 1× PBS (A) or 15 nmol of the GABA_A-receptor inhibitor TPMPA (B), 20 nmol TPMPA (C), 25 nmol TPMPA (D), or 35 nmol TPMPA (E). Fish were allowed to recover for 48 hours before sectioning and immunostaining with antibodies against PCNA or GFP to monitor DNA replication or dedifferentiation of Müller glia, respectively. ONL: outer nuclear layer. INL: inner nuclear layer. GCL: ganglion cell layer. Scale bar: 50 μm. Green: *tuba1a*:GFP; red: PCNA; blue: TO-PRO-3 (A-E). Number of optical slices: 49 (A), 45 (B), 49 (C), 44 (D), and 53 (E). (F) Quantification of PCNA⁺ cells. Each data point is from a separate eye and is an average of two sections, counting all PCNA⁺ cells in the inner nuclear layer. One-way analysis of variance with Tukey's multiple comparison tests were used to test for significance. Error bars are the mean ± SEM. n = 9. *****P* = 8.4 × 10⁻⁹ (PBS vs. 25 nmol TPMPA); *****P* = 1.8 × 10⁻⁵ (15 nmol TPMPA vs. 25 nmol TPMPA); ****P* = 0.0003 (20 nmol TPMPA vs. 25 nmol TPMPA); *****P* = 0.0025 (35 nmol TPMPA vs. 25 nmol TPMPA). GABA_A: Gamma aminobutyric acid A; GFP: green fluorescent protein; PCNA: proliferating cell nuclear antigen; TPMPA: (1,2,5,6-tetrahydropyridin-4-yl)methylphosphinic acid.