Supplemental Figure legends

Supplemental Figure 1. Representative flicker ERGs elicited by sine wave stimuli from wild type (WT) before and after injection of PBS (sham). The stimulus frequencies ranged from 3.906 to 46.875 Hz. The stimulus traces are shown in red beneath the ERGs.

Supplemental Figure 2. Plots of the amplitudes of the flicker ERGs before (A), after APB (B), and after APB+CNQX (C) from WT (●) and Tg (●) rabbits. The amplitude profiles of the pre-drug ERGs of WT and Tg rabbit are different. The means ± SDs are shown. **P <0.01. Two-factor factorial ANOVA

Supplemental Figure 3. Representative waveforms of the fundamental component after FFT. The waveforms of the wild type rabbit (WT) and transgenic rabbit (Tg) are plotted in black. The waveforms of the pre-drug and post-APB, post-APB+CNQX are shown respectively. The stimulus traces are shown in red beneath the waveforms.

Supplemental Figure 4. Plots of the ratio of the amplitude of the ON component/photoreceptor (A), and the OFF component/photoreceptor (B) of the flicker ERGs. The amplitudes ratio in both ON component and OFF component of Tg rabbits is larger than those of WT at all frequencies. The ratio increases at the higher frequencies in both WT and Tg rabbits especially in the Tg rabbit.
Supplementary Figure 1

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<th>Frequency</th>
<th>Pre-drug</th>
<th>Post-sham</th>
<th>Post-sham+sham</th>
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Scale: 25μV, 100ms
Supplementary Figure 2
Supplementary Figure 3
Supplementary Figure 4

A  ON component/photoreceptor amplitude ratio

- WT
- Tg

B  OFF component/photoreceptor amplitude ratio

- WT
- Tg

Frequency (Hz)

Amplitude ratio

3.906 7.813 11.719 15.625 19.531 23.438 27.344 31.250 35.156 39.063 42.969 46.875 50.781