

Supplementary Figures

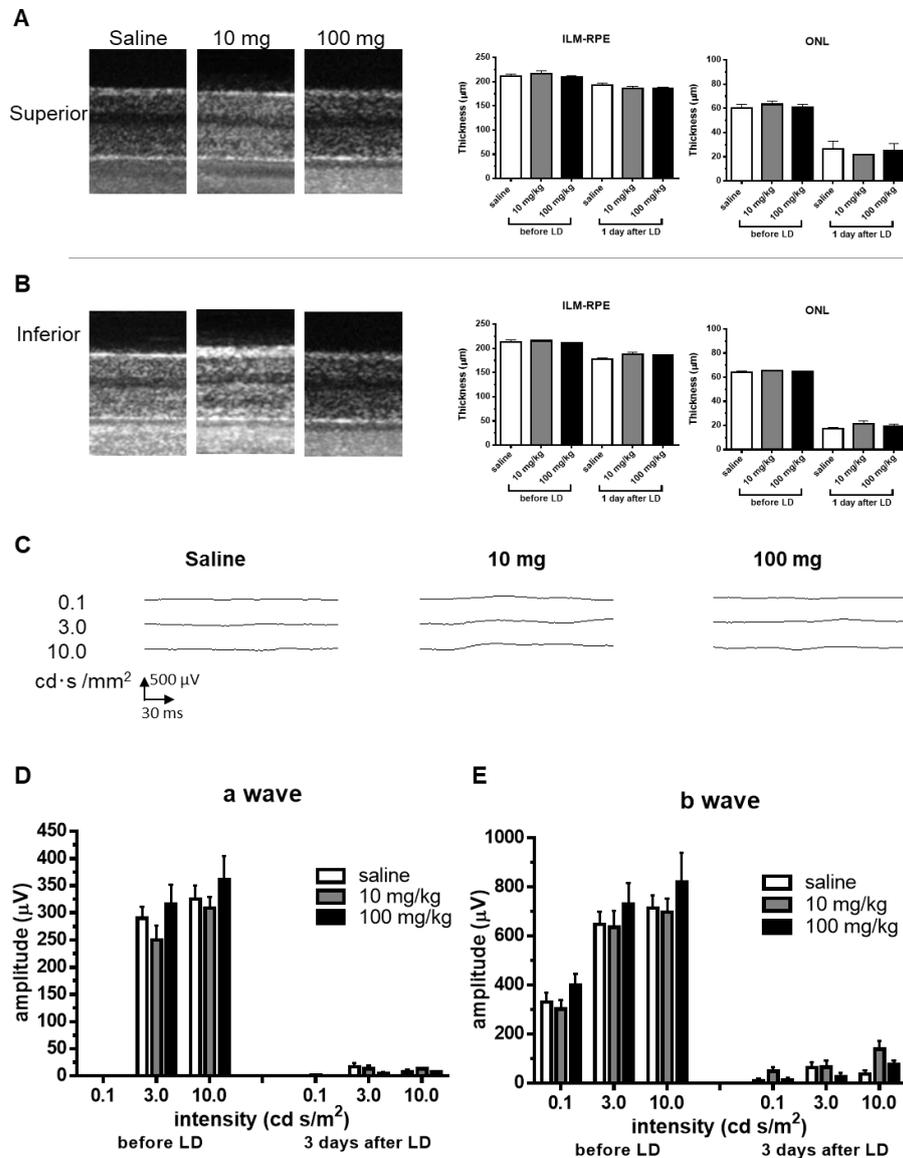


Figure 1S Effects of SIG-1452 on light-induced photoreceptor degenerations

As a preliminary experiments, 3000 lux of light for 24 hours were exposed to rats and 10 mg/kg or 100 mg/kg of SIG-1451 was intraperitoneally administered to the rats based on the experimental schedules shown in Fig. 1S. OCT images were obtained from the superior- (A) and the inferior part (B) of retinas 1 day after the end of the light exposure, The thickness of the inner limiting membrane (ILM) from retinal pigment epithelium (RPE) and the outer nuclear layers including outer segments (ONL) were measured. Typical waveforms of ERGs were shown in C. Amplitudes of a-wave (D) and b-wave (E) were measured. Data are shown as mean \pm SEM (Saline: n=3, 10 mg/kg SIG-1451: n=3, 100 mg/kg SIG-1451: n=4).

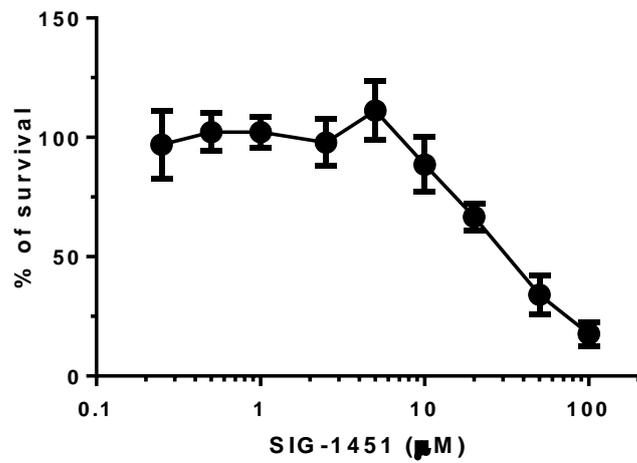
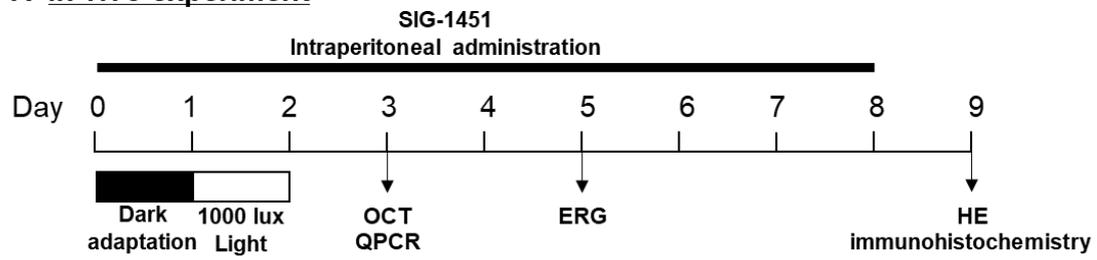


Figure 2S Toxicities of SIG-1451 on cultured Müller cells
Independent experiments were performed and all data was shown in the graph (n=10, mean ± SD).

A *in vivo* experiment



B *in vitro* experiment

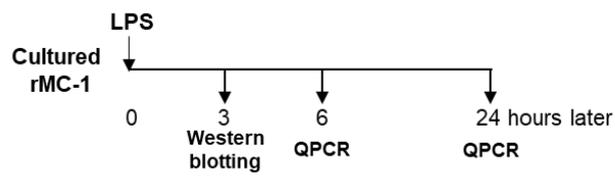


Figure 3S Experimental designs *in vivo* (A) and *in vitro* (B)