1. Obtain center images   2. Obtain black dot images of rosettes   3. Measure black areas by ImageJ   4. Rosettes quantification

Calcurate the rossettes areas in the unit area

and

Obtain the ratio of the occupied rosettes area in the unit area

Figure S1 Quantification of ONL rosettes in sclerochoroid/RPE/retina whole mounts. An example of the selected center area of ONL tiled retina (step1). The retinal region and the selected rosettes were colored black in each layer of white background (step2). The retina area and total areas of black dots of rosettes were measured by analyzing particles in ImageJ (step3). The rosettes areas in the defined retina unit were calculated based on the total rosettes and actual retinal areas, and the area ratios of the occupied rosettes in the unit retina were obtained for rosette quantification (step4). ONL, outer nuclear layer; RPE, retinal pigment epithelium.
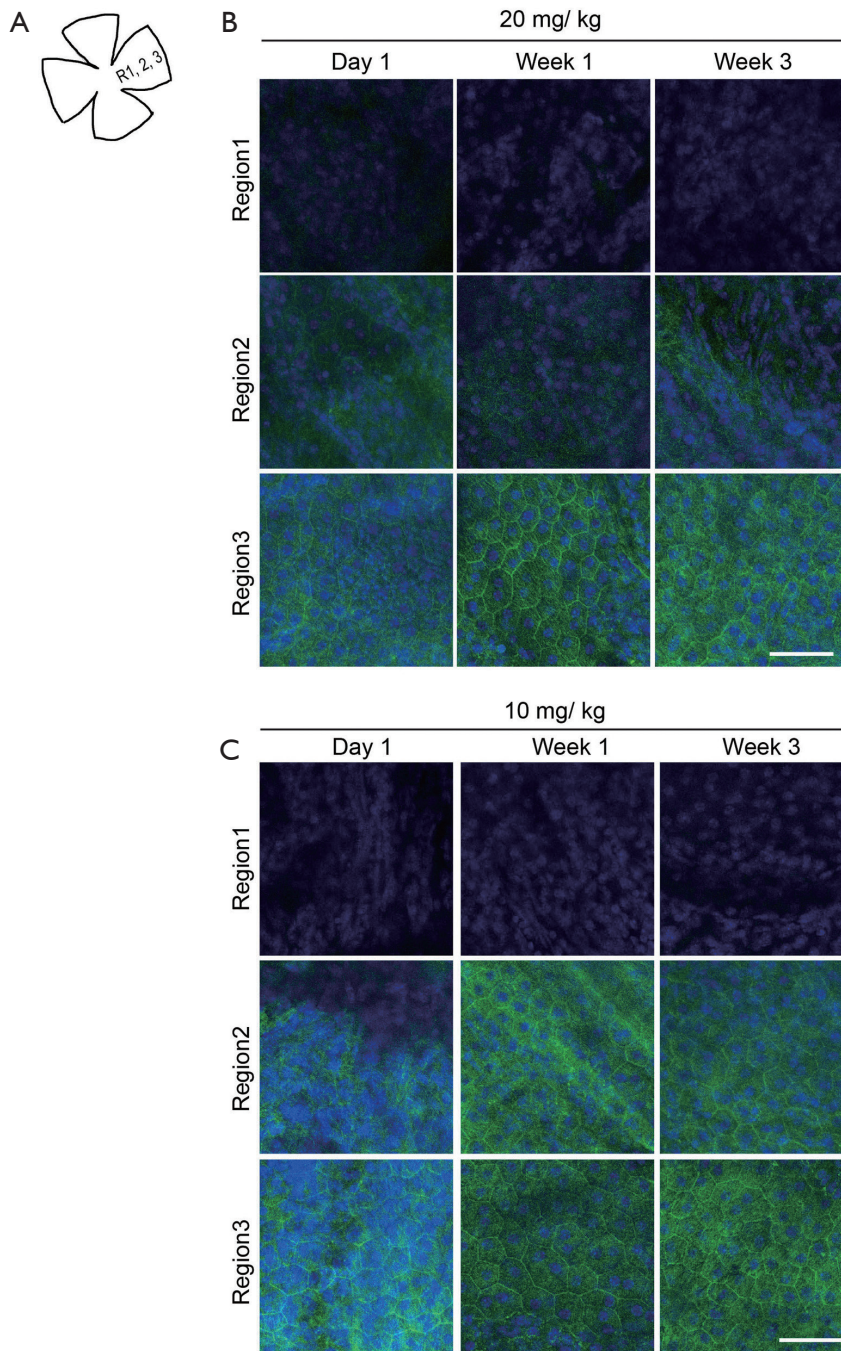
Figure S2 RPE degeneration in horizontal view of whole mounts. SI (10, 20 mg/kg, i.p.)-induced RPE degeneration in BALB/C mice. (A) A schematic drawing of quadrant whole mount with regions indicated from center (R1) to peripheral region (R3). BALB/C mice were injected with 20 mg/kg SI (B) and 10 mg/kg SI (C). Sclerochoroid/RPE/retina whole mounts were stained with Alexa 488-conjugated phalloidin and Hoechst 33342. Images were taken in RPE layers from center (R1) to peripheral (R3) retinas at Day 1, Week 1 and Week 3. Scale bars: 50 μm. RPE, retinal pigment epithelium; SI, sodium iodate.
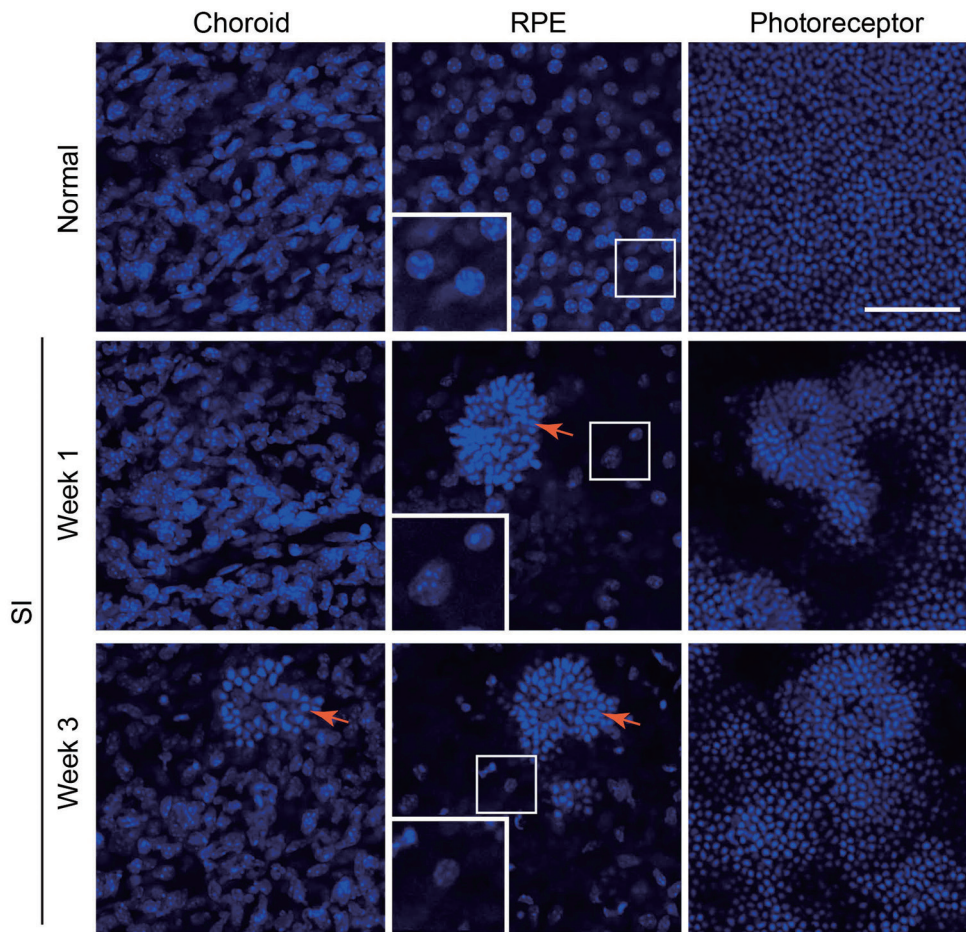
Figure S3 SI-induced ocular damage at the level of choroid, RPE and PR layers in C57BL/6J sclerochoroid/RPE/retina whole mounts stained with Hoechst 33342. SI (50 mg/kg, i.p.)-induced retina degeneration in C57BL/6J mice. PR rosettes (arrows) and RPE nuclei (boxed areas). Inserts contain higher magnification of RPE nuclei in the boxed areas. Scale bar: 50 µm. SI, sodium iodate; RPE, retinal pigment epithelium; PR, photoreceptor.