Legends to Supplementary Figures.

Figure 1. Low magnification of **l**ight photomicrographs of methylene blue-stained sections of the retina encompassing the central region of 24-week old *RanBP2*$^{+/+}$ (**a**) and *RanBP2*$^{+/-}$ mice (**b**). There is a strong increase in pyknotic nuclei in the outer nuclear layer, vacuolization of the inner segments and disorganization of these and the rod outer segments in wild-type mice compared with *RanBP2*$^{+/-}$ mice. Vacuolization was apparent also in the inner retina of wild-type mice. Legend: RPE, retina pigment epithelium; ROS, rod outer segment of photoreceptors; RIS, rod inner segment of photoreceptors; ONL, outer nuclear layer (nuclei of photoreceptors), INL, inner nuclear layer; IPL, inner plexiform layer; GC, ganglion cell layer. Scale bar, 60 μm.

Figure 2. Electron micrograph of 12-week old *RanBP2*$^{+/+}$ mice reared under low light (<70 lux). The photoreceptors present normal ultrastructural morphology. Legend: star, nucleus of a cone photoreceptor; scale bar, 6 μm.

Figure 3. Quantitative morphometric analyses of apoptosis of photoreceptors in central (C) and peripheral (P) regions of age- and genotype-matched retinas of 12- and 24-week old wild-type mice and *RanBP2*$^{+/-}$ mice. Apoptosis is prominent in the central region of the retina in 12- and 24-week old wild-type mice and it increases with age in *RanBP2*$^{+/+}$, but not *RanBP2*$^{+/-}$ mice. Results shown represent the mean ± S.D. (n=4).