**Figure S1.** Fundus photography of *Chm* mutant retinas. The *Chm*<sup>null/WT</sup> and wild type control mice were subjected at the indicated ages to fundus photography using a small animal fundus camera (Kowa Genesis, Japan) in conjunction with an external 90-diopter condensing lens (Volk) using the highest intensity of the light (position 7) for the flash.

**Figure S2.** Extended ERG analysis of the combined *Chm*<sup>flox/Y</sup> *six3-Cre+</sup> and *Chm*<sup>flox/flox</sup> *six3-Cre+</sup> mice. (A) a- and b-wave amplitudes for the individual mice of the indicated strains (red) and the respective controls (*Chm*<sup>flox/Y</sup> and *Chm*<sup>flox/flox</sup>, green). The thick lines denote the average. (B) a/b ratios calculated from the data shown in (A). Again, the thick lines denote the average. The results indicate that the degree of a-wave loss even seen in the raw ERG traces (inset, marked by arrows) exceeds by far the marginal b-wave reduction. Consequently, the a/b ratios of the mutants are significantly reduced.