## SUPPLEMENTARY FIGURE LEGEND:

Supplementary Figure 1. Ophthalmic slit-lamp examination of nestin/hRAMP1 mice. Viewed with broadbeam illumination (column 1 and 3) and transilluminating illumination (columns 2 and 4), eyes of nestin/hRAMP1 mice (hRAMP1, *n* = 6 eyes) and control littermates (*n* = 6 eyes) are indistinguishable and normal. Each row is matched for one of the coat colors segregating in this stock (decreasing pigment from top row to bottom row). The mild iris transillumination defects in hypopigmented control and hRAMP1 mice (bottom row) is normal among all mice with hypopigmented irides.

Supplementary Figure 2. Nestin/hRAMP1 littermates response to CGRP and CGRP antagonist in the light aversion assay. A, Total time spent in light in the first 300-sec interval by littermates control after icv vehicle (empty column, n = 12) compared with CGRP (black column, n = 22), CGRP + olcegepant (hatched column, n = 11), and olcegepant alone (grey column, n = 15). B, Total time spent in light in the second 300-sec interval by littermates control after icv vehicle (empty column, n = 12) compared with CGRP (black column, n = 22), CGRP + olcegepant (hatched column, n = 11), and olcegepant alone (grey column, n = 5). Control littermates from both pedigrees (nestin/hRAMP1 and nestinJ/hRAMP1) were pooled for these studies and the vehicle and CGRP-treatment data are taken from Fig 2. Error bars indicate s.e.m.