## Supplementary Information

A Ser75-to-Asp phospho-mimicking mutation in Src accelerates ageing-related loss of retinal ganglion cells in mice

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## Supplementary Figure S1.

ROCK activity/protein ratios in retinas obtained from young SA mutant mice. The lysate of each retina (10  $\mu$ g) was subjected to anti-ROCK immunoblot analysis (**right**, upper panel). ROCK protein levels were normalised to those of 55 kDa  $\beta$ -tubulin (Tub) (**right**, lower panel) and used to estimate the specific kinase activity (**left**). n = 4. Data are means ± s.d. Unpaired two-tailed *t*-test.



## Supplementary Figure S2.

The full-size dot blots for Figure 1a. Dashed line boxes indicate the cropped images used in Fig. 1a. PCR products from littermates derived from SD or SA heterozygotes were spotted onto duplicate membranes, denatured, neutralized, and fixed. One membrane was hybridized with <sup>32</sup>P-labelled ASO probe *wt*, and the other was hybridized with <sup>32</sup>P-labelled ASO probe *sd* (left) or *sa* (right) to detect the mutant allele .Circle 1, cloned genomic c *-src* DNA fragment (wild-type); circle 2, cloned genomic c *-src* DNA fragment bearing SD mutation; circle 3, cloned genomic c *-src* DNA fragment bearing SA mutation.



Supplementary Figure S3.

The full-length blot (lower) and autoradiograph (upper) for Figure 1c. Dashed line boxes indicate the cropped images used in Fig. 1c.



Supplementary Figure S4.

The full-length blots for Figure 1d. Dashed line boxes indicate the cropped images used in Fig. 1d.



Supplementary Figure S5.

The full-lengh blot for Figure 1e. Dashed line boxes indicate the cropped images used in Fig. 1e.



## Supplementary Figure S6.

The full-lengh blot for Figure 3c. Dashed line boxes indicate the cropped images used in Fig. 3c. The filter was separated along one dot chain line into two pieces, one containing ROCK proteins and the other containing  $\beta$ -tubulin.