

SUPPLEMENTARY MATERIAL

Table S1. PCR primer sequences for genotyping

Transcript	Forward primer sequence (5'-3')	Reverse primer sequence (5'-3')
<i>bsx</i>	ATTGCAAAGGAATGCAGATG	ATTGTCGTCCAGCGTGTATCT
<i>gfp</i>	TTTTCAAGAGTGCCATGCC	CCATGTGTAATCCCAGCAGC
<i>egfp</i>	CAGATGAACTTCAGGGTCAG	CTGCCGTCCTCGATGTTGTG

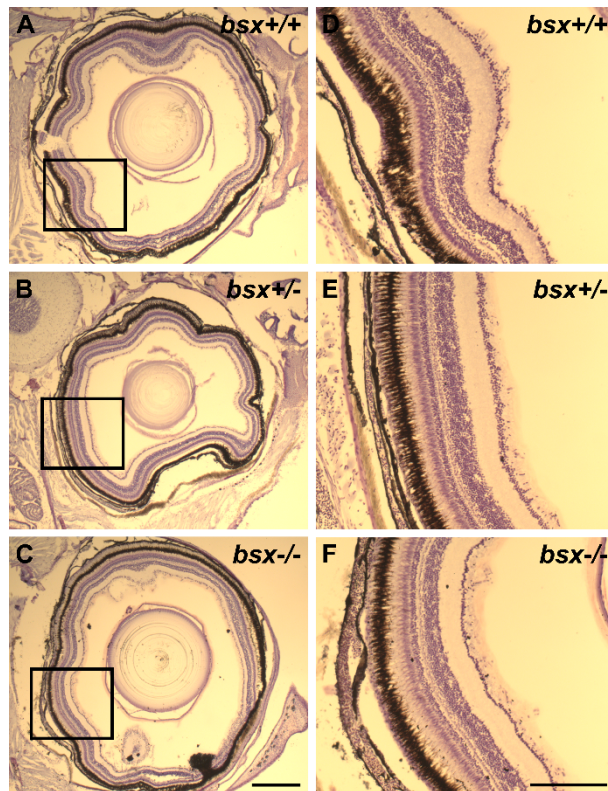


Figure S1. Morphological structure of the retina is unaffected in adult *bsx*^{-/-} mutant zebrafish. Representative images of sagittal sections of *bsx*^{-/-} mutant zebrafish eyes (C, F) stained in cresyl violet. Images on the right (D-F) represent the boxed regions on the left (A-C) at higher resolution. Wildtype (*bsx*^{+/+})(A, D) and heterozygote (*bsx*^{+/-})(B, E) controls are shown for comparison. For examined eyes, n=4 per genotype. Scale bars, 500 μm (left) and 200 μm (right).

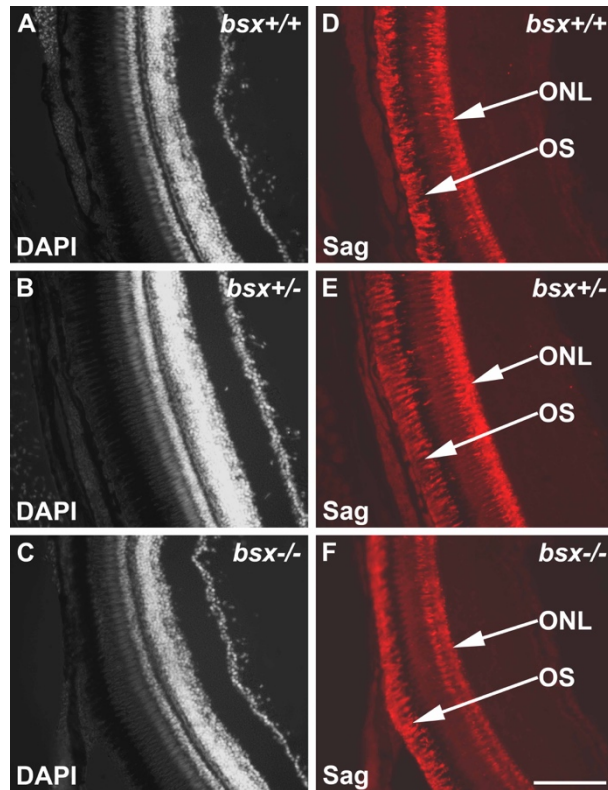


Figure S2. S-antigen protein is present in the retina of adult *bsx*^{-/-} mutant zebrafish. Immunofluorescent staining for S-antigen (Sag) on sagittal sections of adult *bsx*^{-/-} mutant zebrafish retina (F); sections were also stained in DAPI (C). Wildtype (*bsx*^{+/+})(A, D) and heterozygote (*bsx*^{+/-})(B, E) controls are shown for comparison. Scale bar, 100 μ m. ONL, outer nuclear layer, OS, photoreceptor outer segments.

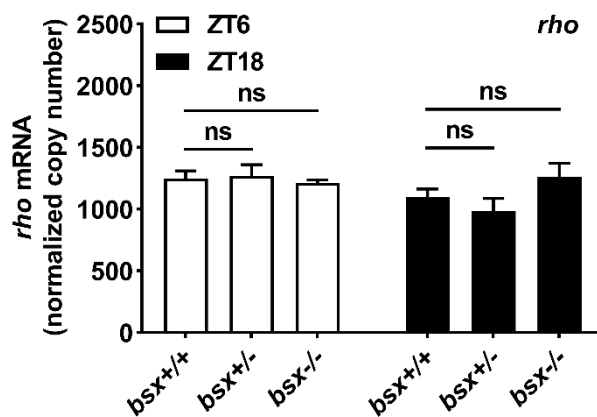


Figure S3. Abundant *rho* transcript levels are maintained in whole eyes of adult *bsx*^{-/-} mutant zebrafish. Analyses of transcript levels of rhodopsin (*rho*) at daytime (ZT6) and nighttime (ZT18) as determined by qRT-PCR. Copy numbers were normalized to the geometric means of copy numbers of *eef1a1* and *actb2*, which were detected at high and stable levels in all samples; copy numbers were further divided by 10000 to account for abundance of transcripts. Two-way ANOVA did not detect significant effects of genotype or time of day. Transcript levels of homozygous (*bsx*^{-/-}) and heterozygous (*bsx*^{+/-}) mutants were compared to those of wildtype (*bsx*^{+/+}) controls. Values on the graphs represent mean \pm SEM; n=4, where each sample is pooled tissue from 3 animals. P-values as determined by Dunnett's multiple comparisons test: ns, not significant. ZT, Zeitgeber time.