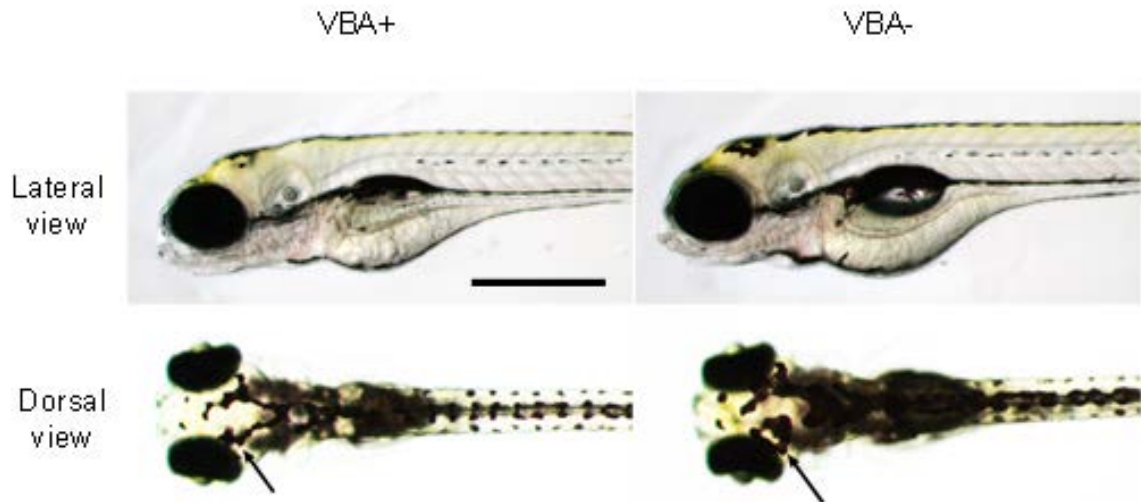


Supplementary Figure 1

1
2
3

A)



B)

Genotype phenotype correlation of Visual Background Adaption (VBA) phenotype			
Line 2 (uob2122)	<i>Genotype</i>		
<i>Phenotype</i>	Wild type	Heterozygous mutant	Homozygous mutant
VBA+ pale (n = 29)	4	25	0
VBA- dark (n = 48)	0	5	43
Line 3 (uob2123)	<i>Genotype</i>		
<i>Phenotype</i>	Wild type	Heterozygous mutant	Homozygous mutant
VBA+ pale (n = 9)	4	5	0
VBA- dark (n = 10)	0	0	10

4

5

6

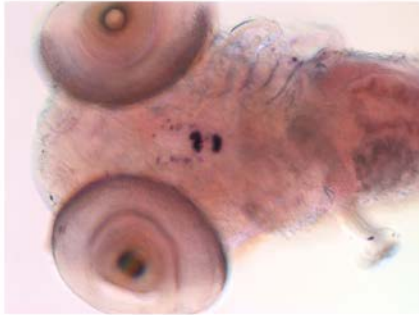
7

Supplementary Figure 2

8

A)

Wild type



B) Homozygous mutant



9

10

11

Supplementary Figure 3

12