

**TABLE S6****Vision related genes with significant *cis* or *trans* effects**

Gene	Biological Process	Test Significant
<i>Bx42</i>	eye-antennal disc development	<i>cis</i>
<i>Doa</i>	compound eye development	<i>cis</i>
<i>Egm</i>	compound eye morphogenesis	<i>cis</i>
<i>Myo61F</i>	visual perception	<i>cis</i>
<i>Pgm</i>	detection of light stimulus during visual perception	<i>cis</i>
<i>Rab6</i>		<i>cis</i>
<i>Rh6</i>	phototransduction	<i>cis</i>
<i>Sema-2a</i>	visual behavior	<i>cis</i>
<i>WASp</i>	sensory organ development	<i>cis</i>
<i>capt</i>	compound eye development	<i>cis</i>
<i>ck</i>	visual perception	<i>cis</i>
<i>ebi</i>	compound eye cone cell fate commitment	<i>cis</i>
<i>faf</i>	compound eye development	<i>cis</i>
<i>gft</i>	compound eye morphogenesis	<i>cis</i>
<i>hyx</i>		<i>cis</i>
<i>klar</i>	compound eye photoreceptor development	<i>cis</i>
<i>mask</i>	compound eye photoreceptor cell differentiation	<i>cis</i>
<i>mbt</i>	eye photoreceptor cell differentiation	<i>cis</i>
<i>norpA</i>	phosphoinositide metabolic process;	<i>cis</i>
<i>repo</i>	visual perception	<i>cis</i>
<i>sec6</i>	rhabdomere development	<i>cis</i>
<i>spi</i>	second mitotic wave during compound eye morphogenesis	<i>cis</i>
<i>trp</i>	phototransduction;calcium ion transport	<i>cis</i>
<i>trpl</i>	response to light stimulus	<i>cis</i>
CG11426		<i>trans</i>

<i>Myo95E</i>	visual perception	<i>trans</i>
<i>Nckx30C</i>	compound eye development	<i>trans</i>
<i>bab2</i>	eye-antennal disc morphogenesis	<i>trans</i>
<i>boss</i>	compound eye development	<i>trans</i>
<i>cac</i>	phototransduction	<i>trans</i>
<i>ninaC</i>	phototransduction	<i>trans</i>
<i>pn</i>	compound eye pigmentation	<i>trans</i>
<i>wts</i>		<i>trans</i>
<i>Notum</i>	regulation of compound eye pigmentation	<i>Cis, trans</i>
<i>Rh3</i>	phototransduction-- UV	<i>Cis, trans</i>
<i>trr</i>	compound eye development	<i>Cis, trans</i>
<i>wfs1</i>	visual perception	<i>Cis, trans</i>

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This table reports genes with significant *cis* and/or *trans* effects that have GO annotations related to vision. Genes were annotated as 'vision' if the key words 'visual', 'eye', 'phototransduction' were in the biological process description or if the cellular component was 'rhabdomere'.