

**Table S3. Test statistics for comparison between dorsal/ventral and anterior/posterior retina compartments**

Species	Strain	Gender	N	p values <sup>1</sup>	
				dorsal/ ventral	ant/post
<i>D. mauritiana</i>	TAM16	f	3	0.235	0.018 *
		m	3	0.665	0.069
<i>D. simulans</i>	ZOM4	f	3	0.642	<0.001 ***
		m	3	0.524	<0.001 ***
<i>D. melanogaster</i>	OreR	f	3	0.139	0.249
		m	3	0.813	0.023 *
<i>D. melanogaster</i>	Zi372	f	3	0.015 *	0.440
		m	1	0.901 <sup>2</sup>	0.192 <sup>2</sup>

<sup>1</sup> replicated G test for pooled data except for: <sup>2</sup> G test for one retina only.