

Table S1 Transcript datasets used in the present study. All data per species were used for assembly as described in **ASGARD** (Ewen-Campen et al. 2011; Zeng et al. 2011; Zeng and Extavour 2012; Zeng et al. 2013). Datasets in bold were used for expression analysis.

	Tissue Type	Sequencing Mode	Sample ID (No. in cited Reference/No. in NCBI)	Library Normalized	No. Reads
<i>G. bimaculatus</i>	Embryos	GS-FLX	SRX023830/SRR060814	Yes	78,936
	Ovaries	GS-FLX	SRX023831/SRR060815	Yes	67,353
	Pooled Ovaries and Embryos	GS_FLX Titanium	SRX023832/SRR060816	No	4,102,057
				Total	4,248,346
<i>O. fasciatus</i>	Pooled Ovaries and Embryos	GS_FLX Titanium	SRX022014/ SRR057573	No	1,293,320
	Pooled Ovaries and Embryos	GS_FLX Titanium	SRX022013/ SRR057572	Yes	656, 783
	Embryos	GS-FLX	SRX022012/ SRR057571	Yes	71,912
	Ovaries	GS-FLX	SRX022011/ SRR057570	Yes	65,395
				Total	2,087,410
<i>P. hawaiiensis</i>	Pooled Ovaries and Embryos	GS_FLX Titanium	SRX0238929/SRR060813	No	3,172,925