Supplemental Table 5

Expression of the components of GABA-ergic mechanism

	Genes		Dev. Stages				
		M.fr	EC	LC		LB	EG
		S.pur	EC	LC	EB	LB	EG
		L.var	EC	LC	EB	LB	EG
		P.liv	EC		EB	LB	EG
Enzyme	*GAD*	*M.fr*	0,421	0,129		0,217	0,758
		S.pur	0,000	0,000	0,039	0,023	0,007
		L.var	NS	NS	NS	NS	NS
Receptors	*GABA A1*	*S.pur*	0,014	0,006	0,007	NS	NS
		L.var	NS	NS	NS	NS	0,004
		P.liv	NS		NS	NS	NS
	GABA B1	*M.fr*	1,778	0,548		0,081	0,036
		S.pur	0,437	0,387	0,021	NS	NS
		P.liv	NS		NS	NS	NS
	GABA B2	*M.fr*	0,829	0,135		0,032	NS
		S.pur	0,036	0,033	0,012	0,005	0,003
		P.liv	NS		NS	NS	NS
Transporter	*GABAT*	*M.fr*	1,15	0,446		0,167	0,213
		S.pur	NS	NS	NS	NS	NS
		L.var	0,452	0,405	0,397	0,023	0,033
		P.liv	0,014		0,013	0,007	NS

NRPM (GHG)

Color bar:

≥	5
	4,0
	3,0
	2,0
	1,0
	0,5
	0,4
	0,3
	0,2
	0,1
	0,01
	0,003
	0

Developmental Stages: EC - early cleavage; LC - late cleavage; EB - early blastula; LB - late blastula; EG - early gastrula. **Species names**: *M.fr - Mesocentrotus franciscanus; S.pur - Strongylocentrotus purpuratus; L.var - Lytechinus variegatus; P.liv - Paracentrotus lividus* . **Gene names**: *GAD* - glutamate decarboxylase; *GABAT* - GABA-transporter. **Data definitions:** NRPM - RPM normalized to the geometric mean of the three housekeeping genes (GHG); NS - NS - not significant value. Transcriptomic data for this analysis were obtained from publicly available datasets:

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2) Hogan, J.D.; Keenan, J.L.; Luo, L.; Ibn-Salem, J.; Lamba, A.; Schatzberg, D.; Piacentino, M.L.; Zuch, D.T.; Core, A.B.; Blumberg, C.; et al. The Developmental Transcriptome for Lytechinus Variegatus Exhibits Temporally Punctuated Gene Expression Changes. Dev Biol 2020, 460, 139–154, doi:10.1016/j.ydbio.2019.12.002.

3) Gildor, T.; Malik, A.; Sher, N.; Avraham, L.; Ben-Tabou de-Leon, S. Quantitative Developmental Transcrip-tomes of the Mediterranean Sea Urchin Paracentrotus Lividus. Mar Genomics 2016, 25, 89–94, doi:10.1016/j.margen.2015.11.013.

4) Tu, Q.; Cameron, R.A.; Davidson, E.H. Quantitative Developmental Transcriptomes of the Sea Urchin Strongylocentrotus Purpuratus. Dev Biol 2014, 385, 160–167, doi:10.1016/j.ydbio.2013.11.019.