

SUPPLEMENTARY MATERIAL

Table S1. Enzyme activities (UE/mg protein) in hydrocorals *Millepora alcicornis* after the 20-day period of acclimation in the marine mesocosm system. Data are expressed as mean $\pm$ standard deviation. For each enzyme, no significant difference was observed among replicates ($p>0.05$; one-way ANOVA). HEX: hexokinase; PK: pyruvate kinase; LDH: lactate dehydrogenase; CS: citrate synthase.

Replicate	Enzyme			
	HEX	PK	LDH	CS
1	0.0213 $\pm$ 0.0038	0.401 $\pm$ 0.021	0.158 $\pm$ 0.030	0.0668 $\pm$ 0.0077
2	0.0209 $\pm$ 0.0056	0.384 $\pm$ 0.022	0.165 $\pm$ 0.036	0.0640 $\pm$ 0.0094
3	0.0229 $\pm$ 0.0041	0.402 $\pm$ 0.015	0.166 $\pm$ 0.032	0.0630 $\pm$ 0.0103
4	0.0208 $\pm$ 0.0041	0.383 $\pm$ 0.016	0.134 $\pm$ 0.031	0.0745 $\pm$ 0.0089

Table S2. Enzyme activities (UE/mg protein) in hydrocorals *Millepora alcicornis* exposed to the different experimental conditions for 16 days. Data are expressed as mean $\pm$ standard deviation. For each enzyme, no significant difference was observed among replicates at the same experimental condition ($p>0.05$; one-way ANOVA).
HEX: hexokinase; PK: pyruvate kinase; LDH: lactate dehydrogenase; CS: citrate synthase.

Enzyme	Replicate	Experimental condition			
		pH 8.1	pH 7.8	pH 7.5	pH 7.2
HEX	1	0.0199 $\pm$ 0.0022	0.0228 $\pm$ 0.0018	0.0189 $\pm$ 0.0012	0.0138 $\pm$ 0.0009
	2	0.0188 $\pm$ 0.0026	0.0234 $\pm$ 0.0015	0.0185 $\pm$ 0.0013	0.0133 $\pm$ 0.0010
	3	0.0165 $\pm$ 0.0018	0.0222 $\pm$ 0.0016	0.0191 $\pm$ 0.0011	0.0155 $\pm$ 0.0008
	4	0.0165 $\pm$ 0.0020	0.0219 $\pm$ 0.0021	0.0177 $\pm$ 0.0009	0.0142 $\pm$ 0.0008
PK	1	0.339 $\pm$ 0.042	0.303 $\pm$ 0.022	0.292 $\pm$ 0.034	0.260 $\pm$ 0.042
	2	0.352 $\pm$ 0.042	0.307 $\pm$ 0.020	0.269 $\pm$ 0.038	0.267 $\pm$ 0.048
	3	0.333 $\pm$ 0.036	0.281 $\pm$ 0.023	0.299 $\pm$ 0.024	0.279 $\pm$ 0.039
	4	0.345 $\pm$ 0.038	0.285 $\pm$ 0.022	0.267 $\pm$ 0.030	0.253 $\pm$ 0.035
LDH	1	0.162 $\pm$ 0.027	0.172 $\pm$ 0.012	0.202 $\pm$ 0.025	0.172 $\pm$ 0.041
	2	0.160 $\pm$ 0.017	0.180 $\pm$ 0.005	0.189 $\pm$ 0.015	0.189 $\pm$ 0.030
	3	0.174 $\pm$ 0.030	0.182 $\pm$ 0.008	0.202 $\pm$ 0.019	0.152 $\pm$ 0.036
	4	0.157 $\pm$ 0.026	0.177 $\pm$ 0.010	0.181 $\pm$ 0.024	0.170 $\pm$ 0.034
CS	1	0.0551 $\pm$ 0.0024	0.0515 $\pm$ 0.0028	0.0553 $\pm$ 0.0100	0.0633 $\pm$ 0.0035
	2	0.0531 $\pm$ 0.0035	0.0538 $\pm$ 0.0045	0.0565 $\pm$ 0.0114	0.0663 $\pm$ 0.0016
	3	0.0544 $\pm$ 0.0042	0.0556 $\pm$ 0.0048	0.0522 $\pm$ 0.0110	0.0630 $\pm$ 0.0009
	4	0.0518 $\pm$ 0.0037	0.0540 $\pm$ 0.0033	0.0549 $\pm$ 0.0123	0.0651 $\pm$ 0.0022

Table S3. Enzyme activities (UE/mg protein) in hydrocorals *Millepora alcicornis* exposed to the different experimental conditions for 30 days. Data are expressed as mean $\pm$ standard deviation. For each enzyme, no significant difference was observed among replicates at the same experimental condition ($p>0.05$; one-way ANOVA).
HEX: hexokinase; PK: pyruvate kinase; LDH: lactate dehydrogenase; CS: citrate synthase.

Enzyme	Replicate	Experimental condition			
		pH 8.1	pH 7.8	pH 7.5	pH 7.2
HEX	1	0.0140 $\pm$ 0.0015	0.0105 $\pm$ 0.0017	0.0125 $\pm$ 0.0021	0.0113 $\pm$ 0.0018
	2	0.0161 $\pm$ 0.0014	0.0121 $\pm$ 0.0016	0.0112 $\pm$ 0.0018	0.0119 $\pm$ 0.0016
	3	0.0156 $\pm$ 0.0017	0.0104 $\pm$ 0.0019	0.0116 $\pm$ 0.0021	0.0130 $\pm$ 0.0019
	4	0.0136 $\pm$ 0.0019	0.0120 $\pm$ 0.0021	0.0111 $\pm$ 0.0020	0.0117 $\pm$ 0.0019
PK	1	0.283 $\pm$ 0.038	0.264 $\pm$ 0.027	0.284 $\pm$ 0.052	0.333 $\pm$ 0.010
	2	0.316 $\pm$ 0.020	0.242 $\pm$ 0.030	0.310 $\pm$ 0.046	0.355 $\pm$ 0.012
	3	0.321 $\pm$ 0.031	0.255 $\pm$ 0.017	0.279 $\pm$ 0.057	0.340 $\pm$ 0.013
	4	0.290 $\pm$ 0.041	0.247 $\pm$ 0.020	0.280 $\pm$ 0.058	0.309 $\pm$ 0.011
LDH	1	0.156 $\pm$ 0.034	0.149 $\pm$ 0.010	0.127 $\pm$ 0.043	0.144 $\pm$ 0.008
	2	0.149 $\pm$ 0.036	0.139 $\pm$ 0.007	0.139 $\pm$ 0.053	0.130 $\pm$ 0.009
	3	0.139 $\pm$ 0.021	0.158 $\pm$ 0.009	0.113 $\pm$ 0.056	0.144 $\pm$ 0.014
	4	0.136 $\pm$ 0.025	0.145 $\pm$ 0.006	0.131 $\pm$ 0.051	0.140 $\pm$ 0.012
CS	1	0.0691 $\pm$ 0.0088	0.0284 $\pm$ 0.0061	0.0328 $\pm$ 0.0136	0.0386 $\pm$ 0.0024
	2	0.0696 $\pm$ 0.0093	0.0239 $\pm$ 0.0042	0.0346 $\pm$ 0.0121	0.0395 $\pm$ 0.0031
	3	0.0699 $\pm$ 0.0079	0.0274 $\pm$ 0.0069	0.0349 $\pm$ 0.0125	0.0437 $\pm$ 0.0060
	4	0.0626 $\pm$ 0.0094	0.0249 $\pm$ 0.0061	0.0368 $\pm$ 0.0127	0.0445 $\pm$ 0.0039