

**Lohbeck et al. - Gene expression changes in the coccolithophore *Emiliana huxleyi* after 500 generations of selection to ocean acidification**

**Supplementary Table S1: Genes of interest (GOI) and endogenous reference genes (ERGs) used in this study.** Gene names as used in the text, full name, protein ID or GenBank accession number (denoted with asterisks), putative function, primer name, primer sequence, amplicon size and reference are given.

Gene name	Full name	Protein ID/*GenBank accession number	Putative function	Primer name	Primer sequence 5'-3'	Amplicon size	Reference
EFG1	Elongation Factor 1	462457	endogenous reference gene	EFG1_F	GCT GGA AGA AGG ACT TTG TTG	101	Mackinder et al. 2011
				EFG1_R	TCC ACC AGT CCA TGT TCT TC		
Actin	Actin	S64188.1*, S64193.1*, S64192.1*, S64191.1*, S64190.1*, S64189.1*	endogenous reference gene	Actin_F	GAC CGA CTG GAT GGT CAA G	96	Mackinder et al. 2011
				Actin_R	GCC AGC TTC TCC TTG ATG TC		
$\alpha$ TUB	$\alpha$ Tubulin	multiple copy	endogenous reference gene	$\alpha$ TUB_F	GCA TCG CCG AGA TCT ACT C	84	Bach et al. 2013
				$\alpha$ TUB_R	TCG CCG ACG TAC CAG TG		
RB	Rubisco	D45845.1	Gene coding for large subunit of RUBISCO	RB_F	CAA TCG GTC ACC CAG ATG GTA	100	Bruhn et al. 2010
				RB_R	GCG ATA TAA TCA CGG CCT TCG		
AEL1	Anion Exchanger Like 1	99943	Bicarbonate transporter, SLC4 family	AEL1_F	TTC ACG CTC TTC CAG TTC TC	102	Mackinder et al. 2011
				AEL1_R	GAG GAA GGC GAT GAA GAA TG		
$\alpha$ CA	$\alpha$ Carbonic Anhydrase 2	456048	Alpha carbonic anhydrase	$\alpha$ CA2_F	AGA GCA GAG CCC TAT CAA CA	134	Richier et al. 2011
				$\alpha$ CA2_R	TCG TCT CGA AGA GCT GGA A		
$\delta$ CA	$\delta$ Carbonic Anhydrase	436031	Delta carbonic anhydrase	$\delta$ CA_F	ACG AGC ACG AGA TGT TCA AG	87	Bach et al. 2013
				$\delta$ CA_R	TCT CGC CAA CCA TCA TCT C		
CAX3	Ca <sup>2+</sup> /H <sup>+</sup> exchanger 3	416800	Ca <sup>2+</sup> /H <sup>+</sup> exchangers, similar to CAX family	CAX3_F2	CTC CTC TGC GTC TTT GCA T	90	Mackinder et al. 2011
				CAX3_R2	GAG GGC GGT GAT GAG GTA		
ATPVc/c	Vacuolar-type H <sup>+</sup> pump	359783	Vacuolar H <sup>+</sup> -ATPase, V0, subunit c/c'	ATPV_F	TAC GGC ACT GCA AAG TCT G	83	Mackinder et al. 2011
				ATPV_R	ACG GGG ATG ATG GAC TTC		
PATP	Plasma membrane type H <sup>+</sup> pump	67081	P type H <sup>+</sup> -ATPase	PATP_F	GAG CAC AAG TTC CTC ATC GTC	105	Bach et al. 2013
				PATP_R	CAC GTC GGC CTT CTT GAG		
NhaA2	Na <sup>+</sup> /H <sup>+</sup> exchanger 2	447659	Na <sup>+</sup> /H <sup>+</sup> antiporter	NhaA2_F	CTC GTC TGC TAT GGC ATC TC	80	Bach et al. 2013
				NhaA2_R	GTT GCT CGC GTC CAT TC		
LCIX	Low CO <sub>2</sub> induced gene	457739	Protein in <i>Emiliana huxleyi</i> 457793	LCIX_F	CAG CAG TCG TGG CTC AAG	94	Bach et al. 2013
				LCIX_R	CGT AAG CGA CGT GGA TCA G		
GPA	Ca <sup>2+</sup> binding protein	431830	Calcium-binding protein in <i>Emiliana huxleyi</i>	gpaBR_F	AGG CCT TCT CCA GCA TCA T	70	Richier et al. 2009
				gpaBR_R	GTT CAG CGT GCT CTC CGA G		

## **References**

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