

Supplementary table 1 – Compilation of endpoints measured after the exposure for 96 h of *Ruditapes phillipinarum* to the unloaded nanomaterial (LDH-NO<sub>3</sub>), the free corrosion inhibitor (MBT) and the nanomaterial with anti-corrosion properties (LDH-MBT). Exposure concentrations (C) ranged from 0 (control – CT) to 100 mg L<sup>-1</sup>. Endpoints included survival (S), air survival capacity (AS), condition index (CI), lipid peroxidation (LPO), ratio between reduced and oxidized glutathiones (GSH:GSSG), catalase (CAT), glutathione peroxidase (GPx), glutathione reductase (GR), glutathione-S-transferases (GSTs), and acetylcholinesterase (AChE). Data are presented as mean values ± standard error.

	C (mg L <sup>-1</sup> )	S (%)	AS (%)	CI (%)	LPO (nmol TBARS/ g WT)	Ratio GSH: GSSG	CAT (µmol/ min/mg protein)	GPx (µmol/ min/mg protein)	GR (µmol/ min/mg protein)	GSTs (µmol/ min/mg protein)	AChE (nmol/ min/mg protein)
CT	0	100±0	100±4	6.1±0.3	24.5±2.8	8.2±0.6	7.9±0.6	0.289±0.001	0.174±0.008	0.19±0.02	0.31±0.02
LDH- NO <sub>3</sub>	0.01	100±0	83±13	6.2±0.1	43.7±11.9	2.7±1.0	21.8±2.4	0.279±0.005	0.276±0.007	0.17±0.03	0.24±0.03
	0.1	100±0	93±5	6.3±0.2	42.7±11.9	1.3±0.2	23.9±1.8	0.284±0.003	0.280±0.003	0.23±0.10	0.19±0.02
	1	100±0	88±6	6.2±0.5	30.8±8.2	1.1±0.2	11.4±2.9	0.286±0.001	0.285±0.001	0.19±0.02	0.21±0.02
	10	100±0	98±5	4.7±0.6	18.6±5.2	1.1±0.1	9.0±1.5	0.288±0.002	0.285±0.002	0.18±0.03	0.17±0.03
	100	100±0	78±5	5.1±0.3	15.7±5.2	0.9±0.2	6.4±1.5	0.288±0.002	0.288±0.001	0.17±0.03	0.16±0.03
MBT	0.01	100±0	63±21	5.4±0.5	24.3±4.5	7.3±1.1	5.6±0.5	0.289±0.001	0.180±0.016	0.15±0.02	0.24±0.05
	0.1	91±9	68±5	4.3±1.0	15.0±2.2	7.4±0.8	7.5±0.7	0.276±0.011	0.168±0.029	0.36±0.10	0.20±0.07
	1	100±0	54±5	5.4±0.7	26.6±5.5	5.8±0.7	14.1±3.3	0.284±0.004	0.199±0.048	0.15±0.02	0.17±0.03
	10	91±9	29±0	4.7±0.1	24.1±6.6	1.8±0.3	28.4±7.7	0.284±0.004	0.279±0.004	0.17±0.04	0.19±0.03
	100	73±14	29±12	4.6±0.7	29.8±6.7	1.4±0.2	26.3±0.7	0.284±0.001	0.279±0.004	0.15±0.02	0.15±0.04
LDH- MBT	0.01	100±0	73±0	6.2±0.9	17.5±5.3	1.3±0.1	6.1±0.7	0.284±0.002	0.281±0.002	0.19±0.03	0.23±0.04
	0.1	100±0	73±0	6.5±0.8	17.6±4.1	0.9±0.2	5.1±0.3	0.290±0.001	0.288±0.002	0.11±0.02	0.20±0.02
	1	100±0	73±0	6.7±0.3	25.5±4.4	0.8±0.3	7.4±0.5	0.267±0.004	0.267±0.004	0.15±0.02	0.20±0.02
	10	100±0	63±5	5.6±0.6	36.3±5.5	1.5±0.4	6.4±0.9	0.272±0.008	0.271±0.008	0.21±0.03	0.20±0.01
	100	82±12	29±0	4.6±0.3	45.0±5.8	0.4±0.2	4.5±0.4	0.268±0.005	0.268±0.005	0.12±0.04	0.20±0.02