Table S1. Principal component (PC) analysis of the stress biomarker profiles in the digestive gland of *M. edulis.*

Variables with high loadings on the respective PC (i.e. with the absolute value of the correlation coefficient >0.5) are highlighted in bold and red.

PC number	Eigenvalue	% Total variance	Cumulative eigenvalue	Cumulative %
1	4,371913	33,63010	4,37191	33,6301
2	2,878956	22,14581	7,25087	55,7759
3	1,461839	11,24492	8,71271	67,0208
4	1,064906	8,19159	9,77761	75,2124
5	0,772798	5,94460	10,55041	81,1570
6	0,655006	5,03851	11,20542	86,1955
7	0,507750	3,90577	11,71317	90,1013
8	0,441991	3,39993	12,15516	93,5012
9	0,312821	2,40632	12,46798	95,9075
10	0,250074	1,92365	12,71805	97,8312
11	0,166488	1,28067	12,88454	99,1119
12	0,082542	0,63494	12,96708	99,7468
13	0,032916	0,25320	13,00000	100,0000

Variable	Factor loadings based on correlations		
	PC1	PC 2	PC3
Caspase 2	-0,401005	**-0,618211**	-0,224183
Caspase 3	**-0,837742**	-0,084785	-0,181335
Caspase 8	**-0,717195**	-0,292993	-0,295436
TAK1	**-0,565904**	-0,046684	**-0,504317**
NF-κB	**-0,735176**	-0,322469	0,229305
Bcl-2	**-0,608910**	0,063702	0,228400
BAX	**-0,609359**	0,173613	**-0,547264**
IKKα	0,419785	**0,594705**	-0,424704
TBK1	**-0,543942**	-0,042877	0,221162
TBARS	0,325443	**-0,746336**	0,186408
NRR	**0,682777**	0,001376	**-0,548485**
Cathepsin D total	-0,356237	**0,823031**	0,129514
Cathepsin D free	-0,470119	**0,820646**	0,226256

Table S2. Principal component (PC) analysis of the stress biomarker profiles in the digestive gland of *C. gigas*.

Variables with high loadings on the respective PC (i.e. with the absolute value of the correlation coefficient >0.5) are highlighted in bold and red.

PC number	Eigenvalue	% Total variance	Cumulative Eigenvalue	Cumulative %
1	7,134833	54,88333	7,13483	54,8833
2	1,910867	14,69897	9,04570	69,5823
3	1,385330	10,65638	10,43103	80,2387
4	0,695269	5,34823	11,12630	85,5869
5	0,468452	3,60347	11,59475	89,1904
6	0,407127	3,13175	12,00188	92,3221
7	0,305348	2,34883	12,30723	94,6710
8	0,222869	1,71438	12,53009	96,3853
9	0,194611	1,49701	12,72471	97,8824
10	0,130942	1,00725	12,85565	98,8896
11	0,081688	0,62837	12,93734	99,5180
12	0,036101	0,27770	12,97344	99,7957
13	0,026563	0,20433	13,00000	100,0000

	Factor loadings based on correlations		
Variable	PC1	PC2	PC3
Caspase 2	**-0,862258**	0,226480	0,056310
Caspase 3	-0,204913	0,450020	**-0,779008**
Caspase 8	**-0,880418**	-0,178410	0,137842
TAK1	**-0,821681**	0,237215	0,063673
NF-κB	**-0,664749**	**0,574869**	-0,010685
Bcl-2	**-0,932299**	-0,093032	-0,022755
BAX	**-0,563251**	**0,547934**	0,196998
IKKα	**-0,866568**	0,361548	-0,016142
TBK1	**-0,773454**	-0,098958	-0,070868
TBARS	**-0,685870**	**-0,573139**	-0,105592
NRR	-0,108838	-0,273419	**-0,831124**
Cathepsin D total	**-0,852292**	-0,471557	0,065614
Cathepsin D free	**-0,844333**	-0,404317	0,036141