Electronic Supplementary Material (ESI) for RSC Advances.

S**Table 1** Genes and primers used in RT-qPCR

Genes	**NCBI Gene id**	**Description**	**Forward and reverse primer**	**PCR product size[a]**
18S	DQ369700.1 [b]	18s ribosomalRNA gene	CGGCTACCACATCCAAGGAA GCTGGAATTACCGCGGCT	128
HXK1	850614	Hexokinase isoenzyme 1, a cytosolic protein that catalyzes phosphorylation of glucose during glucose metabolism	GATCGGTACTAGAGC TCAGCAGCAATGTGA	90
PYK1	851193	pyruvate kinase 1, functions as a homotetramer in glycolysis to convert phosphoenolpyruvate to pyruvate, the input for aerobic (TCA cycle) or anaerobic (glucose fermentation) respiration	GGTACCATCGGTCCAAAGAC CCGTGAGAGAAGTTCATACG	92
HOG1	850803	Mitogen-activated protein kinase involved in osmoregulation	CGGCAGGTGTAATTCATAGG GAGGATCCTGAATTCTAGCT	104
GPD1	851539	NAD-dependent glycerol-3-phosphate dehydrogenase, key enzyme of glycerol synthesis, essential for growth under	TAGGCTGGGGTAACAACGCT GTGATCAAATCAGCAACACC	101

		osmotic stress		
FPS1	850683	Plasma membrane channe l, member of major intrinsic protein (MIP) family, involved in efflux of glycerol	CTCATATCCGCAGTAACAGC CGCATGATTACTACTACCGC	116
PDC1	850733	pyruvate decarboxylase isozymes 1; key enzyme in alcoholic fermentation; decarboxylates pyruvate to acetaldehyde	CCAGGTGACTTCAACTTGTC AATTCACCGACACCGAAGGT	161
ALD6	856044	Cytosolic aldehyde dehydrogenase; activated by $Mg2^{+}$ and utilizes $NADP^{+}$ as the preferred coenzyme; required for conversion of acetaldehyde to acetate	AAGATTGCATTCACC GACTTACCACCTAGT	98
ADH1	854068	Alcohol dehydrogenase; fermentative isozyme active as homo- or heterotetramers; required for the reduction of acetaldehyde to ethanol, the last step in the glycolytic pathway	ATACTCTGGTGTCTG GCACCTTCGTGACCA	93

[a] As expected by BLAST on s288c strain.

[b] Genbank accession.