

Table S1: Comparative analysis of the predicted *S. ludwigii* UTAD17 ORFeome with the sets of proteins of *S. cerevisiae* S288c.

<i>S. cerevisiae</i> gene	Protein Function	<i>S. ludwigii</i> UTAD17 orthologous ORF name
HXT1/HXT6	Hexose Transporter (low-affinity)	SCODWIG_02272/SCODWIG_01057/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015
HXT2	Hexose Transporter (high-affinity)	SCODWIG_02272/SCODWIG_01057/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015/SCODWIG_03454
HXT3/HXT5	Hexose Transporter (low-affinity)	SCODWIG_01057/SCODWIG_02272/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015/SCODWIG_03454
HXT4/HXT7	Hexose Transporter (high-affinity)	SCODWIG_01057/SCODWIG_02272/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015/SCODWIG_03454
HXT8	Hexose Transporter (unknown function)	SCODWIG_02272/SCODWIG_01057/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015/SCODWIG_03454
HXT9	Hexose Transporter (putative)	SCODWIG_01057/SCODWIG_02272/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015/SCODWIG_03454
HXT10	Hexose Transporter (putative)	SCODWIG_02272/SCODWIG_01057/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015/SCODWIG_03454
HXT11	Hexose Transporter	SCODWIG_01057/SCODWIG_02272/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015
HXT13/HXT17	Hexose Transporter (putative transmembrane polyol transporter)	SCODWIG_02272/SCODWIG_01057/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015
HXT14	Hexose Transporter	SCODWIG_03563/SCODWIG_02272/SCODWIG_01057/SCODWIG_03801/ SCODWIG_03974/SCODWIG_04015
HXT15	Hexose Transporter (putative transmembrane polyol transporter)	SCODWIG_02272/SCODWIG_01057/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_03454/SCODWIG_04015
HXT16	Hexose Transporter (putative transmembrane polyol transporter)	SCODWIG_02272/SCODWIG_03801/SCODWIG_03974/SCODWIG_03563/ SCODWIG_03454/SCODWIG_04015
GAL2	Galactose Permease	SCODWIG_02272/SCODWIG_01057/SCODWIG_03801/SCODWIG_03974/ SCODWIG_03563/SCODWIG_04015/SCODWIG_03454
HXK1/HXK2	Hexokinase isoenzyme	SCODWIG_02966/SCODWIG_01735
GLK1/EMI2	Glucokinase	SCODWIG_01735/SCODWIG_02966
PGI1	Phosphoglucose isomerase	SCODWIG_01883
PFK1	Phosphofructokinase (alpha subunit)	SCODWIG_02053
PFK2	Phosphofructokinase (beta subunit)	SCODWIG_01491
FBA1	Fructose 1,6-bisphosphate aldolase	SCODWIG_00116
TPI1	Triose-Phosphate Isomerase	SCODWIG_00702
TDH1	Triose-Phosphate Dehydrogenase isoenzyme 1	SCODWIG_02663/SCODWIG_02233/SCODWIG_00205

TDH2/TDH3	Triose-Phosphate Dehydrogenase isoenzyme 2	SCODWIG_02233/SCODWIG_02663/SCODWIG_00205
PGK1	3-PhosphoGlycerate Kinase	SCODWIG_01455
GPH1	Glycogen Phosphorylase	SCODWIG_02626
ENO1/ENO2	Phosphopyruvate hydratase	SCODWIG_00273
PYK12/CDC19	Pyruvate kinase	SCODWIG_03273
PDC5	Pyruvate decarboxylase (minor isoform)	SCODWIG_02550/SCODWIG_03821
PDC6	Pyruvate decarboxylase (minor isoform)	SCODWIG_02550/SCODWIG_03821
PDC1	Pyruvate decarboxylase (major isoform)	SCODWIG_02550/SCODWIG_03821
ADH5/ADH1	Alcohol dehydrogenase	SCODWIG_02765/SCODWIG_01877/SCODWIG_00922/SCODWIG_04004/SCODWIG_01402
ADH4	Alcohol dehydrogenase (zinc-dependent)	-
ADH3	Alcohol dehydrogenase(mitochondrial)	SCODWIG_01877/SCODWIG_02765/SCODWIG_04004/SCODWIG_00922
ADH2	Alcohol dehydrogenase (glucose-repressible)	SCODWIG_02765/SCODWIG_01877/SCODWIG_04004/SCODWIG_00922
ADH6	Alcohol dehydrogenase (NADPH-dependent)	SCODWIG_02296/SCODWIG_01877
ADH7	Alcohol dehydrogenase (NADPH-dependent)	SCODWIG_02296
THI13	HMP-P precursor synthesis	-
THI20	HMP kinase and HMP-P kinase	SCODWIG_03914/SCODWIG_03996/SCODWIG_04014
THI21	HMP kinase and HMP-P kinase	SCODWIG_03914/SCODWIG_03996/SCODWIG_04014
THI4	Thiazole synthase	SCODWIG_02921
THI6	Thiamine-phosphate diphosphorylase and hydroxyethylthiazole kinase	SCODWIG_02681
THI80	Thiamine pyrophosphokinase	SCODWIG_03709
THI10/THI17	Thiamine transporter	SCODWIG_03263/SCODWIG_02398/SCODWIG_03795/SCODWIG_00195/SCODWIG_03794
ATF1	Alcohol acetyltransferase	-
ATF2	Alcohol acetyltransferase	-
AYT1	Acetyltransferase	-
EEB1/EHT1	Acyl-coenzymeA:ethanol O-acyltransferase	SCODWIG_03242/SCODWIG_00846
MGL2	Monoacylglycerol and triacylglycerol lipase (minor Acyl-transferase activity)	SCODWIG_00846
IAH1	Isoamyl acetate-hydrolyzing esterase	SCODWIG_03553

S. ludwigii UTAD17 proteins were considered similar to those present in *S. cerevisiae* S288c when the associated alignment had a respective e-value below e^{-20} and a minimum identity of 30%. ORF's with an e-value of 0.0 are marked in bold.