

Table 4 Peptides of other basal pathways like glycolysis, oxidative pentosephosphate pathway and TCA cycle measured with the Mass Western. Subcellular localization and concentrations in mixotrophic (M) and autotrophic (A) growth conditions. For the two growth conditions, the peptide concentration is given in attomole per 1000 cells. Relative distributions of the peptides on the three subcellular fractions mitochondrial membrane, chloroplast membrane and soluble fraction are given as percentage and calculated as average levels of both growth conditions. In case the distribution of a peptide within a subcellular compartment was different between the two growth conditions, separate contributions (M) versus (A) are indicated and quantified in percentage. Relative standard deviations are calculated from $n = 4$ biological replicates per growth condition

Protein JGI Chlre3 #	Mitochondria membrane (%)	Chloroplast membrane (%)	Stroma, Cytosol soluble (%)	M amol per 10^3 cells	A amol per 10^3 cells	M SE (%)	A SE (%)	Identifier
Vacuolar/Peroxisomal								
195493	3	15	82	78	233	± 32	± 13	SGA1
196354	nd	nd	100	48	86	± 26	± 27	SHMT2
194461	2	8	90	284	265	± 25	± 3	SHMT1
194541_1	nd	nd	nd	nd	nd	nd	nd	AGT1
194541_2	nd	nd	nd	nd	nd	nd	nd	AGT1
196366	nd	nd	nd	nd	nd	nd	nd	GLYK
126382_1	4	19	77	70	31	± 35	± 12	ATPVB
126382_2	2	2	96	83	25	± 31	± 22	ATPVB
54608	nd	nd	100	101	nd	± 26	nd	ATPVA
196298	nd	nd	nd	nd	nd	nd	nd	PGPI
Glycolysis								
196305	nd	nd	nd	nd	nd	nd	nd	PGM1a
83064	4	5	91	751	502	± 20	± 13	PGH1
136854	nd	nd	nd	nd	nd	nd	nd	PYK1
18029	nd/nd	nd/1 (A)	nd/99 (A)	nd	42	nd	± 18	GPM1B
135220	1	3	96	72	90	± 31	± 5	PGI1
196624	nd	nd	nd	nd	nd	nd	nd	PFK1
196443	nd/nd	nd/21 (A)	nd/79 (A)	nd	19	nd	± 11	GAPDH
152892_1	2	nd	97	20	45	± 47	± 6	FBA1
152892_2	nd	1	99	90	62	± 39	± 23	FBA1
29185	nd	nd	nd	nd	nd	nd	nd	FBA2
102889	nd/nd	nd/nd	nd/100 (A)	nd	22	nd	± 22	GAPN1
Gluconeogenesis								
24263	0	3	97	689	206	± 19	± 10	CIS2
137163	3	12	86	423	325	± 18	± 5	MDH1
196612	4 (M)/nd	8 (M)/nd	88 (M)/nd	40	nd	± 21	nd	PEPC1B
C1								
136279	5	2	93	44	9	± 35	± 23	PGD
162449	2 (M)/nd	6 (M)/nd	91 (M)/nd	155	nd	± 22	nd	PGD

Table 4 (continued)

Protein JGI Chlre3 #	Mitochondria membrane (%)	Chloroplast membrane (%)	Stroma, Cytosol soluble (%)	M amol per 10^3 cells	A amol per 10^3 cells	M SE (%)	A SE (%)	Identifier
Major CHO/starch								
205913	2	4	94	68	100	± 31	± 6	STA1
191662	nd/nd	nd/nd	nd/100 (A)	nd	102	nd	± 16	STA3
136037	2	6	93	62	145	± 22	± 7	STA6
140452	nd/nd	nd/5 (A)	nd/95 (A)	0	17	nd	± 19	STA11
173725	1 (M)/nd	1 (M)/nd	98 (M)/nd	31	nd	± 16	nd	alpha AMY
128630	0	8	92	24	141	± 31	± 6	GLH1
137300	nd/nd	nd/nd	nd/nd	nd	nd	nd	nd	PHOA/B
192398	nd/nd	nd/nd	nd/nd	nd	nd	nd	± 41	PWD1
OPP								
101528	nd/nd	nd/100 (A)	nd/nd	nd	77	nd	± 10	PGLS
153630	nd/nd	nd/nd	nd/nd	nd	nd	nd	nd	PGLS
139269	6	11	83	174	339	± 23	± 27	LCI19
196431	6	12	82	121	110	± 27	± 20	TAL2
173281	nd/nd	86 (M)/nd	14 (M)/nd	633	nd	± 15	nd	FEA2
120516	nd/nd	6 (M)/nd	94 (M)/nd	76	nd	± 35	nd	unknown
TCA								
127317	nd/nd	nd/nd	nd/nd	713	nd	nd	nd	NUO5
176233	0	1	98	734	766	± 18	± 15	CYC
185200	nd/31 (A)	nd/69 (A)	nd/nd	468	387	nd	± 10	ATP4
194915	16 (M)/1 (A)	19 (M)/30 (A)	65 (M)/69 (A)	26	404	± 32	± 5	CS1
138059	nd/nd	nd/nd	nd/nd	nd	nd	nd	nd	UCP1
193810	13	29	58	35	26	± 35	± 16	PDC1
196500	56 (M)/2 (A)	3 (M)/98 (A)	40 (M)/0	155	96	± 36	± 11	DLA2
57890	nd/nd	nd/nd	nd/nd	nd	nd	nd	nd	GCSL
129025	2	9	90	440	708	± 22	± 5	ACH1
196044	19	1	80	78	102	± 33	± 33	IHD2
196833	nd/nd	nd/nd	nd/100 (A)	nd	12	nd	± 25	MME1
192083	2	10	89	280	328	± 30	± 13	MDH5
133318	nd/nd	89 (M)/100 (A)	11 (M)/nd	72	66	± 27	± 9	ADH1
78348	32 (M)/16 (A)	48 (M)/77 (A)	20 (M)/7 (A)	1942	1669	± 19	± 4	ATPase2