SUPPLEMENTARY INFORMATION

LC-MS-based absolute metabolite quantification: Application to metabolic flux measurement in trypanosomes

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	Extracellular concentration (µM ± SEM)						
Name	0h	7h	24h	31h	48h	51h	57h
Inosine	1.8 ± 0.1	1.8 ± 0.1	1.9 ± 0.1	2.1 ± 0.1	0.9 ± 0.1	-	-
L-Arginine	142.8 ± 6.1	142 ± 3.5	148.1 ± 3.1	168.0 ± 6.8	157.5 ± 3.2	157.9 ± 0.9	156.1 ± 5.8
L-Asparagine	56.8 ± 2.8	56.9 ± 1.9	71.0 ± 1.9	84.0 ± 3.1	87.7 ± 2.2	87.5 ± 0.7	85.3 ± 2.8
L-Aspartate	47.5 ± 2.4	48.7 ± 2.2	60.2 ± 1.7	71.5 ± 3.0	77.7 ± 2.4	78.9 ± 0.6	80.5 ± 3.1
L-Glutamine	790.9 ± 28.8	797.3 ± 12.0	733.8 ± 10.4	785.4 ± 33.6	660.8 ± 14.8	624.1 ± 9.9	562.0 ± 15.0
L-Histidine	22.9 ± 1.1	23.4 ± 0.8	27.6 ± 0.8	31.7 ± 1.3	32.8 ± 1.1	31.9 ± 0.3	32.0 ± 0.7
L-Lysine	192.1 ± 7.2	192.8 ± 4.5	203.9 ± 3.3	227.6 ± 9.0	217.5 ± 4.4	214.4 ± 1.2	210.9 ± 6.6
L-Methionine	22.5 ± 1.0	22.9 ± 0.7	25.9 ± 0.5	30.2 ± 1.2	26.5 ± 0.4	24.6 ± 0.7	17.9 ± 0.6
L-Proline	59.3 ± 2.4	59.3 ± 1.8	72.7 ± 1.4	86.6 ± 4.4	85.2 ± 1.8	85.0 ± 0.7	83.8 ± 3.5
L-Threonine	62.6 ± 2.8	63.6 ± 2.2	75.1 ± 1.7	86.9 ± 4.1	80.7 ± 1.4	78.1 ± 1.2	67.6 ± 1.8
L-Tryptophan	10.2 ± 1.1	8.8 ± 0.3	10.1 ± 0.3	12.1 ± 0.8	7.6 ± 0.3	5.9 ± 0.5	0.8 ± 0.1
L-Valine	87.2 ± 3.6	87.6 ± 3.5	108.2 ± 3.9	126.7 ± 3.8	114.9 ± 2.9	108.5 ± 1.4	88.0 ± 2.1
Pyruvate	61.7 ± 2.0	92.5 ± 7.2	240.2 ± 30.3	652.4 ± 56.8	5467.9 ± 472.0	7740.3 ± 493.5	15683.9 ± 1437.6
L-Glutamate	79.3 ± 4.2	80.3 ± 3.0	93.4 ± 2.5	113.7 ± 5.3	131.2 ± 5.2	137.8 ± 1.9	151.8 ± 7.4
cis-Aconitate	2.0 ± 0.1	2.0 ± 0.0	2.0 ± 0.0	2.1 ± 0.1	2.0 ± 0.0	2.0 ± 0.1	2.1 ± 0.1
Xanthine	185.7 ± 6.9	188.4 ± 4.0	196.7 ± 3.2	225.8 ± 9.0	240.9 ± 6.3	251.5 ± 2.7	269.2 ± 12.5
L-Homoserine	23.9 ± 1.2	24.3 ± 0.9	29.3 ± 0.8	34.6 ± 1.9	31.8 ± 0.6	30.6 ± 0.5	26.1 ± 0.8
L-Tyrosine	89.1 ± 4.0	89.2 ± 3.3	111.1 ± 2.2	131.1 ± 5.7	120.9 ± 1.8	113.8 ± 1.7	80.8 ± 2.5
L-Ornithine	15.9 ± 0.7	16.8 ± 1.1	16.6 ± 0.7	18.1 ± 1.0	17.1 ± 0.7	16.7 ± 0.2	16.0 ± 0.6
Pantothenate	1.6 ± 0.1	1.6 ± 0.0	1.5 ± 0.0	1.7 ± 0.1	1.6 ± 0.1	1.7 ± 0.0	1.7 ± 0.1
L-Alanine	356.3 ± 52.9	331.1 ± 59.7	333.6 ± 22.6	392.2 ± 37.9	540.9 ± 22.3	606.7 ± 40.1	761.4 ± 84.5
2-Oxoglutarate	0.8 ± 0.1	0.9 ± 0.1	1.2 ± 0.1	1.9 ± 0.1	13.0 ± 1.3	18.8 ± 1.2	39.9 ± 3.5
Succinate	2.8 ± 0.1	2.9 ± 0.1	2.8 ± 0.0	3.3 ± 0.1	5.1 ± 0.3	6.3 ± 0.3	11.5 ± 1.1
Citrate	212.8 ± 8.4	214.5 ± 4.6	207.1 ± 5.2	231.2 ± 10.9	216.5 ± 5.4	216.3 ± 5.1	223.4 ± 8.8
Hypoxanthine	11.9 ± 0.7	11.7 ± 0.5	12.5 ± 0.4	14.3 ± 0.5	6.1 ± 0.4	3.4 ± 0.5	-
O-Acetyl-L-serine	1.0 ± 0.1	1.1 ± 0.1	1.1 ± 0.1	1.2 ± 0.1	1.2 ± 0.1	1.2 ± 0.0	1.3 ± 0.1
Glycerate	1.8 ± 0.1	1.9 ± 0.0	1.9 ± 0.0	1.9 ± 0.0	2.5 ± 0.0	2.7 ± 0.1	3.5 ± 0.2
L-Isoleucine	132.3 ± 6.0	132.2 ± 4.8	168.9 ± 4.5	189.6 ± 6.5	128.9 ± 2.8	107.0 ± 3.9	61.4 ± 2.0
Glycine	143.4 ± 8.2	146.9 ± 3.8	161.7 ± 3.0	183.3 ± 6.1	186.8 ± 3.6	186.9 ± 1.5	195.5 ± 7.2
L-Phenylalanine	55.4 ± 13.4	43.4 ± 4.3	78.8 ± 21.8	56.1 ± 3.3	68.3 ± 33.4	42.6 ± 10.7	2.9 ± 0.7

	Extracellular concentration (µM ± SEM)						
Name	0h	7h	24h	31h	48h	51h	57h
L-Citrulline	4.0 ± 0.2	4.1 ± 0.1	3.9 ± 0.1	4.3 ± 0.2	4.0 ± 0.1	4.1 ± 0.0	4.2 ± 0.2
L-Serine	118.5 ± 4.0	121.7 ± 4.1	133.3 ± 2.9	145.5 ± 4.9	146.5 ± 2.3	146.0 ± 2.9	148.0 ± 5.1