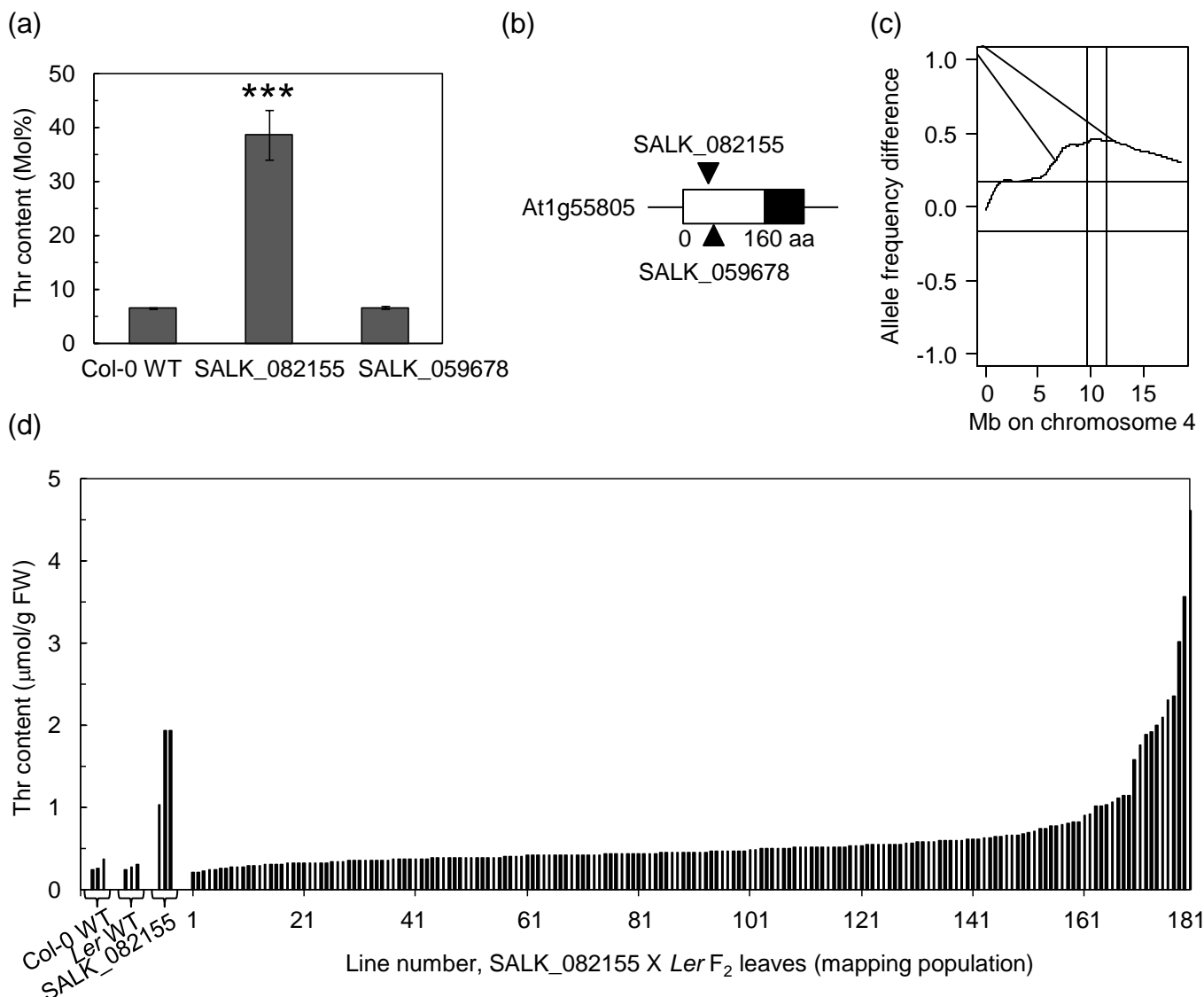


**Supplemental Figure S1.** Domains in full-length mono-functional AKs and dual-functional AK-HSDHs.

Brown boxes represent transit peptides; blue boxes represent AK domains; yellow boxes represent Lys-binding ACT domains; green boxes represent Thr-binding ACT domains; pink boxes represent HSDH domains. aa, amino acids. The numbers indicate the positions of first and last amino acids of the corresponding proteins and domains.



**Supplemental Figure S2.** The high Thr phenotype in SALK\_082155 is caused by a second-site mutation.

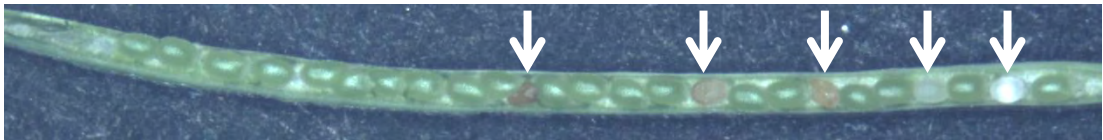
(a) Thr content (Mol%) in Col-0 wild type and the two mutants. The high Thr phenotype is observed in SALK\_082155 but not in SALK\_059678. Values are presented as mean  $\pm$  SE ( $n = 4$ ). Asterisks indicate significant differences between the mutant and the Col-0 wild type (Student's  $t$  test; \*,  $p < 0.05$ ; \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.001$ ).

(b) Schematic representation of the At1g55805 locus and two mutants: SALK\_082155 and SALK\_059678. The white rectangle represents a single exon; the black rectangle represents the 3' untranslated region; solid lines represent intergenic regions; black triangles represent T-DNA insertions.

(c) Bulk segregant array mapping of the mutation in SALK\_082155 that causes the Thr increase. The x-axis represents Arabidopsis chromosome 4. The y-axis represents allele frequency difference between mutant and wild-type pools. The allele frequency difference is positive for mutations in the Col-0 background and negative for mutations in the *Ler* background. SALK\_082155 is in the Col-0 background. According to array mapping results, the second-site mutation is within a 1.75 Mb region of chromosome 4 (coordinates: 9727489 - 11477489). Targeted genomic DNA sequencing shows that the mutation is located to the *AK-HSDH2* gene (At4g19710) in this region.

(d) Distribution of the Thr content in pooled  $F_2$  leaves from 181 segregating  $F_2$  lines derived from a cross between SALK\_082155 and *Ler* wild type. Bars representing leaf Thr content of three Col-0 wild-type plants, three *Ler* wild-type plants, and three SALK\_082155 mutant plants are indicated on the left end.

(a) *ak-hsdh2-1/ak-hsdh2-1 AK-HSDH1-1/ak-hsdh1-1*



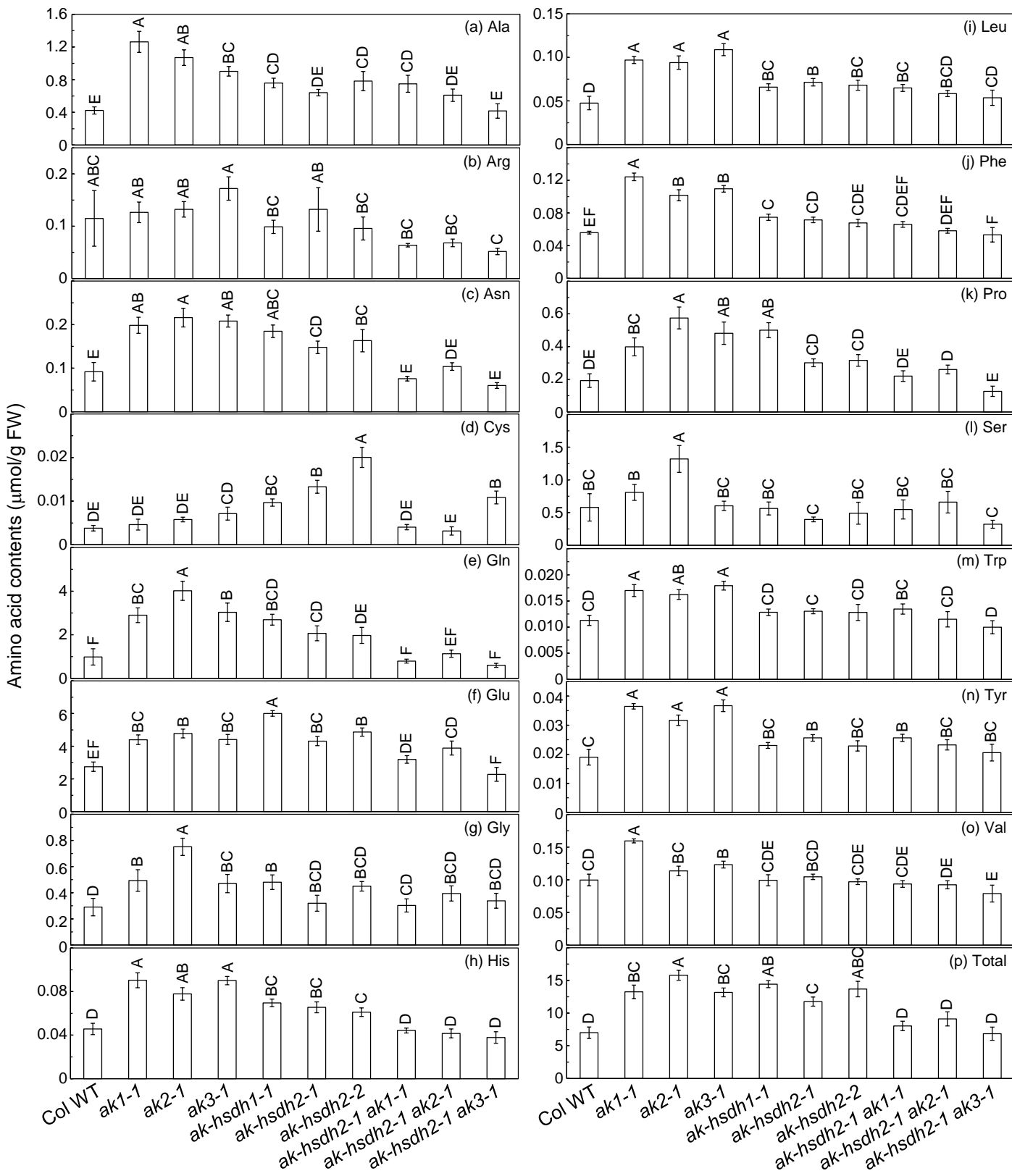
(b) Wild type in both *AK-HSDH2* and *AK-HSDH1* genes



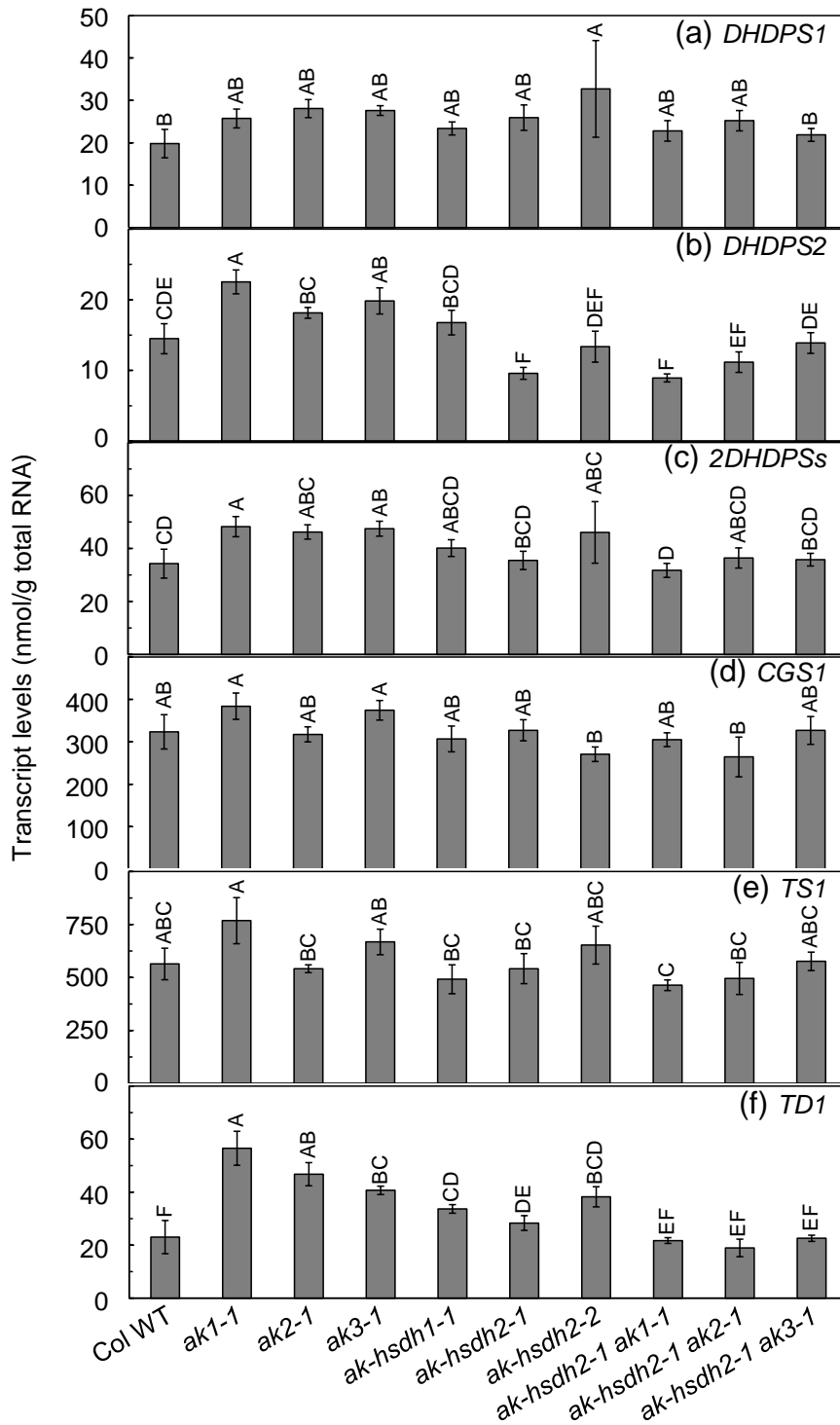
**Supplemental Figure S3.** Representative siliques from *ak-hsdh2-1/ak-hsdh2-1 AK-HSDH1-1/ak-hsdh1-1* and *AK-HSDH2-1/AK-HSDH2-1 AK-HSDH1-1/AK-HSDH1-1* plants. Arrows indicate aborted seeds.

(a) A representative silique from an *ak-hsdh2-1/ak-hsdh2-1 AK-HSDH1-1/ak-hsdh1-1* plant.

(b) A representative silique from an *AK-HSDH2-1/AK-HSDH2-1 AK-HSDH1-1/AK-HSDH1-1* plant.

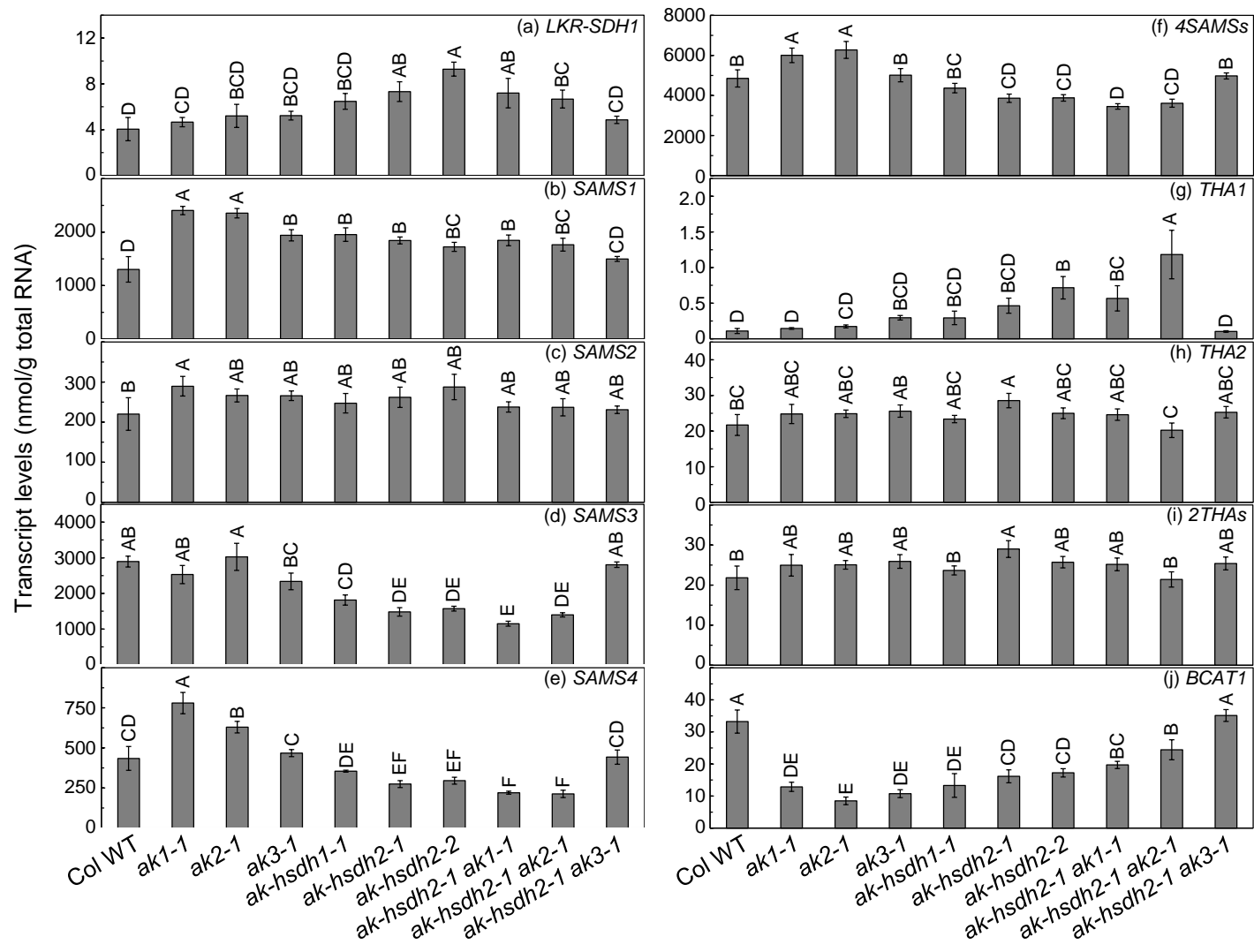


**Supplemental Figure S4.** The contents of other free amino acids in leaves of four-week-old plants. (a) Ala; (b) Arg; (c) Asn; (d) Cys; (e) Gln; (f) Glu; (g) Gly; (h) His; (i) Leu; (j) Phe; (k) Pro; (l) Ser; (m) Trp; (n) Tyr; (o) Val; (p) total amount of 20 standard amino acids. Values are presented as mean  $\pm$  SE (n = 5). Values not connected by the same letter are significantly different (Student's t-test,  $p < 0.05$ ). Values connected by the same letter are not significantly different.



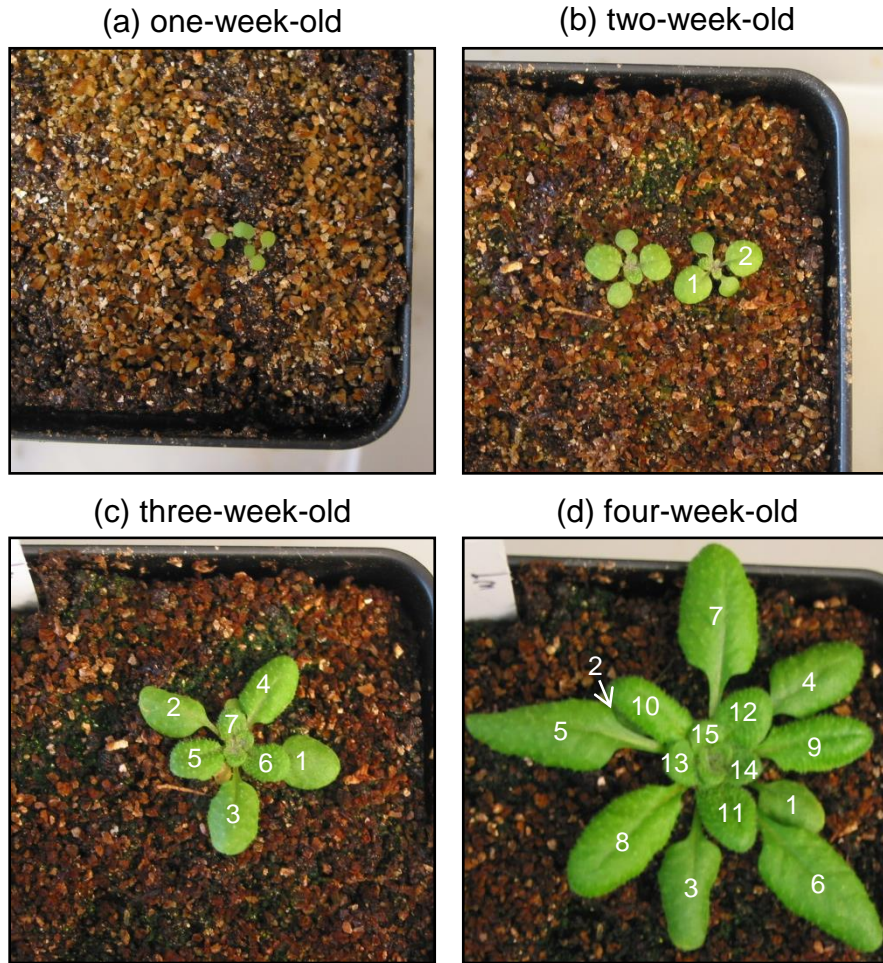
**Supplemental Figure S5.** Transcript levels of other genes involved in Asp-derived amino acid biosynthesis in leaves of four-week-old plants.

(a) *DHDPS1*; (b) *DHDPS2*; (c) *2DHDPSs*; (d) *CGS1*; (e) *TS1*; (f) *TD1*. Values are presented as mean  $\pm$  SE ( $n = 3 - 4$ ). Values not connected by the same letter are significantly different (Student's *t*-test,  $p < 0.05$ ). Values connected by the same letter are not significantly different.



**Supplemental Figure S6.** Transcript levels of select genes involved in Asp-derived amino acid catabolism in leaves of four-week-old plants.

(a) *LKR-SDH1*; (b) *SAMS1*; (c) *SAMS2*; (d) *SAMS3*; (e) *SAMS4*; (f) *4SAMSs*; (g) *THA1*; (h) *THA2*; (i) *2THAs*; (j) *BCAT1*. Values are presented as mean  $\pm$  SE (*n* = 3 - 4). Values not connected by the same letter are significantly different (Student's *t*-test, *p* < 0.05). Values connected by the same letter are not significantly different.



**Supplemental Figure S7.** Leaf numbering of one-, two-, three-, and four-week old Col-0 wild-type *Arabidopsis* plants grown under a 12-h-light /12-h-dark photoperiod.

(a) Image of one-week-old plants. Plants at this stage only have cotyledon leaves. Due to the relatively small size, the entire above-ground portion was harvested and approximately 20 plants per replicate were used for leaf free amino acid assay.

(b) Image of two-week-old plants. The first two true leaves are labeled in the order of emergence. The first two true leaves were harvested and approximately 10 plants per replicate were used for free amino acid assay.

(c) Image of a three-week-old plant. The first seven true leaves are labeled in the order of emergence. Leaf numbers 2 – 4 were harvested and one plant per replicate was used for leaf free amino acid assay.

(d) Image of a four-week-old plant. The first 15 leaves are labeled in the order of emergence. Leaf number 9 was used for free and protein-bound amino acid assays. Leaf numbers 8 – 10 were used for quantitative RT-PCR and immunoblot analyses. Due to the large amount of tissues required for enzyme extraction, the entire above-ground portion was used for enzyme activity assays.

**Supplemental Table S1.** The contents of protein-bound amino acids in leaves of four-week-old plants

Data are presented as mean  $\pm$  SE (n = 3 - 5). Due to technical reasons, Cys, Met, and Trp were not determined. Values not connected by the same letter are significantly different (Student's *t*-test, *p* < 0.05). Values connected by the same letter are not significantly different.

Amino acid ( $\mu\text{mol/g FW}$ )	Col WT	<i>ak1-1</i>	<i>ak2-1</i>	<i>ak3-1</i>	<i>ak-hsdh1-1</i>	<i>ak-hsdh2-1</i>	<i>ak-hsdh2-2</i>	<i>ak-hsdh2-1 ak1-1</i>	<i>ak-hsdh2-1 ak2-1</i>	<i>ak-hsdh2-1 ak3-1</i>
Ala	12.5 $\pm$ 3.9 <sup>ABC</sup>	15.5 $\pm$ 5.4 <sup>A</sup>	11.2 $\pm$ 0.9 <sup>ABC</sup>	6.4 $\pm$ 0.4 <sup>C</sup>	7.0 $\pm$ 1.9 <sup>C</sup>	7.2 $\pm$ 1.1 <sup>BC</sup>	15.1 $\pm$ 1.0 <sup>AB</sup>	10.7 $\pm$ 1.8 <sup>ABC</sup>	11.8 $\pm$ 2.5 <sup>ABC</sup>	15.9 $\pm$ 4.0 <sup>A</sup>
Arg	4.9 $\pm$ 0.2 <sup>AB</sup>	4.7 $\pm$ 0.3 <sup>AB</sup>	4.4 $\pm$ 0.6 <sup>B</sup>	4.4 $\pm$ 0.3 <sup>B</sup>	5.1 $\pm$ 0.4 <sup>AB</sup>	4.8 $\pm$ 0.5 <sup>AB</sup>	5.0 $\pm$ 0.5 <sup>AB</sup>	5.6 $\pm$ 0.2 <sup>AB</sup>	5.8 $\pm$ 0.2 <sup>AB</sup>	5.4 $\pm$ 0.5 <sup>AB</sup>
Asn+Asp <sup>a</sup>	5.9 $\pm$ 1.7 <sup>ABC</sup>	6.8 $\pm$ 1.7 <sup>AB</sup>	3.9 $\pm$ 0.6 <sup>BCD</sup>	2.9 $\pm$ 0.2 <sup>U</sup>	3.0 $\pm$ 0.4 <sup>U</sup>	3.3 $\pm$ 0.5 <sup>CU</sup>	5.8 $\pm$ 0.8 <sup>ABCD</sup>	4.0 $\pm$ 0.3 <sup>BCD</sup>	4.7 $\pm$ 0.2 <sup>ABCD</sup>	7.1 $\pm$ 1.6 <sup>A</sup>
Gln+Glu <sup>b</sup>	28.7 $\pm$ 7.9 <sup>ABC</sup>	32.8 $\pm$ 5.2 <sup>AB</sup>	23.2 $\pm$ 2.9 <sup>BCDE</sup>	14.4 $\pm$ 1.6 <sup>E</sup>	15.5 $\pm$ 4.5 <sup>DE</sup>	18.3 $\pm$ 3.0 <sup>CDE</sup>	31.2 $\pm$ 2.8 <sup>ABC</sup>	27.8 $\pm$ 3.0 <sup>ABCD</sup>	34.5 $\pm$ 6.8 <sup>AB</sup>	36.3 $\pm$ 5.9 <sup>A</sup>
Gly	7.9 $\pm$ 2.4 <sup>AB</sup>	8.7 $\pm$ 1.9 <sup>AB</sup>	6.9 $\pm$ 0.4 <sup>AB</sup>	5.5 $\pm$ 0.6 <sup>B</sup>	4.9 $\pm$ 1.1 <sup>B</sup>	4.7 $\pm$ 0.8 <sup>B</sup>	9.9 $\pm$ 1.1 <sup>A</sup>	6.9 $\pm$ 0.9 <sup>AB</sup>	6.6 $\pm$ 0.5 <sup>AB</sup>	10.1 $\pm$ 1.9 <sup>A</sup>
His	4.5 $\pm$ 0.1 <sup>A</sup>	4.6 $\pm$ 0.3 <sup>A</sup>	4.3 $\pm$ 0.4 <sup>A</sup>	4.3 $\pm$ 0.3 <sup>A</sup>	4.8 $\pm$ 0.1 <sup>A</sup>	4.5 $\pm$ 0.4 <sup>A</sup>	4.4 $\pm$ 0.2 <sup>A</sup>	4.6 $\pm$ 0.1 <sup>A</sup>	4.6 $\pm$ 0.3 <sup>A</sup>	4.7 $\pm$ 0.2 <sup>A</sup>
Ile	11.5 $\pm$ 0.2 <sup>A</sup>	11.2 $\pm$ 0.9 <sup>A</sup>	10.9 $\pm$ 0.7 <sup>A</sup>	11.3 $\pm$ 0.4 <sup>A</sup>	11.6 $\pm$ 0.5 <sup>A</sup>	11.2 $\pm$ 0.7 <sup>A</sup>	11.6 $\pm$ 0.6 <sup>A</sup>	11.8 $\pm$ 0.4 <sup>A</sup>	11.9 $\pm$ 0.5 <sup>A</sup>	12.0 $\pm$ 0.5 <sup>A</sup>
Leu	18.8 $\pm$ 0.6 <sup>A</sup>	19.3 $\pm$ 0.8 <sup>A</sup>	18.2 $\pm$ 1.2 <sup>A</sup>	18.3 $\pm$ 0.9 <sup>A</sup>	19.0 $\pm$ 0.7 <sup>A</sup>	17.7 $\pm$ 1.0 <sup>A</sup>	18.8 $\pm$ 0.6 <sup>A</sup>	18.9 $\pm$ 0.5 <sup>A</sup>	18.1 $\pm$ 0.0 <sup>A</sup>	18.8 $\pm$ 0.5 <sup>A</sup>
Lys	13.2 $\pm$ 0.3 <sup>A</sup>	13.8 $\pm$ 0.4 <sup>A</sup>	12.4 $\pm$ 1.0 <sup>A</sup>	13.0 $\pm$ 1.1 <sup>A</sup>	13.7 $\pm$ 0.7 <sup>A</sup>	13.1 $\pm$ 0.8 <sup>A</sup>	13.1 $\pm$ 0.6 <sup>A</sup>	13.7 $\pm$ 0.4 <sup>A</sup>	14.4 $\pm$ 0.8 <sup>A</sup>	13.4 $\pm$ 0.7 <sup>A</sup>
Phe	9.6 $\pm$ 0.1 <sup>A</sup>	9.5 $\pm$ 0.5 <sup>A</sup>	9.3 $\pm$ 0.9 <sup>A</sup>	9.1 $\pm$ 0.5 <sup>A</sup>	9.9 $\pm$ 0.4 <sup>A</sup>	9.2 $\pm$ 0.5 <sup>A</sup>	9.1 $\pm$ 0.3 <sup>A</sup>	9.4 $\pm$ 0.3 <sup>A</sup>	10.1 $\pm$ 0.4 <sup>A</sup>	9.7 $\pm$ 0.2 <sup>A</sup>
Pro	10.9 $\pm$ 1.7 <sup>AB</sup>	12.0 $\pm$ 1.9 <sup>AB</sup>	10.2 $\pm$ 0.5 <sup>AB</sup>	8.4 $\pm$ 0.5 <sup>B</sup>	8.5 $\pm$ 1.1 <sup>B</sup>	8.8 $\pm$ 0.4 <sup>B</sup>	12.9 $\pm$ 0.6 <sup>A</sup>	10.1 $\pm$ 0.7 <sup>AB</sup>	12.1 $\pm$ 2.3 <sup>AB</sup>	13.0 $\pm$ 1.8 <sup>A</sup>
Ser	4.6 $\pm$ 1.6 <sup>ABC</sup>	5.6 $\pm$ 2.1 <sup>AB</sup>	2.7 $\pm$ 0.4 <sup>BC</sup>	2.1 $\pm$ 0.2 <sup>C</sup>	2.4 $\pm$ 0.5 <sup>C</sup>	2.6 $\pm$ 0.3 <sup>BC</sup>	4.6 $\pm$ 0.7 <sup>ABC</sup>	3.1 $\pm$ 0.3 <sup>BC</sup>	3.8 $\pm$ 0.3 <sup>ABC</sup>	6.0 $\pm$ 1.5 <sup>A</sup>
Thr	4.9 $\pm$ 1.4 <sup>AB</sup>	6.6 $\pm$ 0.75 <sup>A</sup>	4.5 $\pm$ 0.6 <sup>AB</sup>	3.4 $\pm$ 0.2 <sup>B</sup>	3.1 $\pm$ 0.9 <sup>B</sup>	3.0 $\pm$ 0.9 <sup>B</sup>	5.6 $\pm$ 1.4 <sup>AB</sup>	4.7 $\pm$ 0.9 <sup>AB</sup>	5.6 $\pm$ 1.1 <sup>AB</sup>	5.8 $\pm$ 1.6 <sup>AB</sup>
Tyr	0.88 $\pm$ 0.09 <sup>A</sup>	1.1 $\pm$ 0.2 <sup>A</sup>	0.79 $\pm$ 0.17 <sup>A</sup>	0.78 $\pm$ 0.09 <sup>A</sup>	0.89 $\pm$ 0.15 <sup>A</sup>	0.81 $\pm$ 0.08 <sup>A</sup>	0.88 $\pm$ 0.05 <sup>A</sup>	0.81 $\pm$ 0.09 <sup>A</sup>	0.90 $\pm$ 0.04 <sup>A</sup>	1.1 $\pm$ 0.1 <sup>A</sup>
Val	15.6 $\pm$ 1.1 <sup>AB</sup>	15.7 $\pm$ 0.6 <sup>AB</sup>	13.9 $\pm$ 1.2 <sup>B</sup>	15.5 $\pm$ 0.5 <sup>AB</sup>	15.7 $\pm$ 0.8 <sup>AB</sup>	15.0 $\pm$ 1.1 <sup>AB</sup>	14.9 $\pm$ 0.2 <sup>AB</sup>	16.1 $\pm$ 1.0 <sup>AB</sup>	15.1 $\pm$ 0.7 <sup>AB</sup>	17.1 $\pm$ 0.7 <sup>A</sup>
Asn+Asp+Ile+ Thr+Lys <sup>c</sup>	35.8 $\pm$ 3.4 <sup>ABC</sup>	38.8 $\pm$ 1.8 <sup>AB</sup>	32.0 $\pm$ 2.7 <sup>ABC</sup>	30.8 $\pm$ 1.6 <sup>C</sup>	31.6 $\pm$ 2.0 <sup>BC</sup>	30.9 $\pm$ 2.7 <sup>C</sup>	36.3 $\pm$ 1.2 <sup>ABC</sup>	34.4 $\pm$ 1.1 <sup>ABC</sup>	36.9 $\pm$ 1.2 <sup>ABC</sup>	38.6 $\pm$ 2.9 <sup>AB</sup>
Total <sup>d</sup>	154 $\pm$ 22 <sup>ABCD</sup>	168 $\pm$ 17 <sup>AB</sup>	137 $\pm$ 10 <sup>BCD</sup>	120 $\pm$ 5 <sup>D</sup>	125 $\pm$ 11 <sup>CD</sup>	125 $\pm$ 11 <sup>CD</sup>	163 $\pm$ 6 <sup>ABC</sup>	148 $\pm$ 6 <sup>ABCD</sup>	160 $\pm$ 12 <sup>ABCD</sup>	176 $\pm$ 19 <sup>A</sup>

<sup>a</sup>Asn and Asp are reported together because Asn was converted to Asp during acid hydrolysis.

<sup>b</sup>Gln and Glu are reported together because Gln was converted to Glu during acid hydrolysis.

<sup>c</sup>Asn+Asp+Ile+Thr+Lys stands for the total amount of protein-bound Asn, Asp, Ile, Thr, and Lys.

<sup>d</sup>Total amino acids refer to the total amount of 17 amino acids in this table. Cys, Met, and Trp are not included because they are either destroyed (Cys and Trp) or partially oxidized (Met) during acid hydrolysis.



**Supplemental Table S2.** Leaf free amino acid contents in one-week-old plants

Data are presented as mean  $\pm$  SE (n = 5). Values not connected by the same letter are significantly different (Student's *t*-test, *p* < 0.05). Values connected by the same letter are not significantly different.

Amino acid ( $\mu$ mol/g FW)	Col WT	<i>ak1-1</i>	<i>ak2-1</i>	<i>ak3-1</i>	<i>ak-hsdh1-1</i>	<i>ak-hsdh2-1</i>	<i>ak-hsdh2-2</i>	<i>ak-hsdh2-1 ak1-1</i>	<i>ak-hsdh2-1 ak2-1</i>	<i>ak-hsdh2-1 ak3-1</i>
Ala	1.10 $\pm$ 0.06 <sup>B</sup>	1.42 $\pm$ 0.07 <sup>A</sup>	1.04 $\pm$ 0.11 <sup>BC</sup>	1.06 $\pm$ 0.08 <sup>BC</sup>	0.79 $\pm$ 0.12 <sup>D</sup>	0.84 $\pm$ 0.08 <sup>CD</sup>	0.68 $\pm$ 0.06 <sup>D</sup>	1.04 $\pm$ 0.04 <sup>BC</sup>	0.70 $\pm$ 0.09 <sup>D</sup>	0.77 $\pm$ 0.03 <sup>D</sup>
Arg	0.033 $\pm$ 0.000 <sup>AB</sup>	0.034 $\pm$ 0.003 <sup>AB</sup>	0.033 $\pm$ 0.002 <sup>AB</sup>	0.034 $\pm$ 0.003 <sup>AB</sup>	0.034 $\pm$ 0.001 <sup>AB</sup>	0.032 $\pm$ 0.001 <sup>AB</sup>	0.037 $\pm$ 0.001 <sup>A</sup>	0.031 $\pm$ 0.001 <sup>B</sup>	0.035 $\pm$ 0.001 <sup>AB</sup>	0.034 $\pm$ 0.002 <sup>AB</sup>
Asn	0.19 $\pm$ 0.01 <sup>A</sup>	0.16 $\pm$ 0.00 <sup>B</sup>	0.14 $\pm$ 0.01 <sup>BC</sup>	0.15 $\pm$ 0.01 <sup>BC</sup>	0.11 $\pm$ 0.01 <sup>DE</sup>	0.13 $\pm$ 0.01 <sup>CD</sup>	0.10 $\pm$ 0.01 <sup>E</sup>	0.15 $\pm$ 0.01 <sup>BC</sup>	0.12 $\pm$ 0.01 <sup>DE</sup>	0.15 $\pm$ 0.00 <sup>BC</sup>
Asp	1.71 $\pm$ 0.08 <sup>ABC</sup>	1.64 $\pm$ 0.07 <sup>BCD</sup>	1.51 $\pm$ 0.06 <sup>DE</sup>	1.78 $\pm$ 0.09 <sup>AB</sup>	1.44 $\pm$ 0.04 <sup>EF</sup>	1.84 $\pm$ 0.09 <sup>A</sup>	1.50 $\pm$ 0.05 <sup>DE</sup>	1.80 $\pm$ 0.04 <sup>AB</sup>	1.30 $\pm$ 0.05 <sup>F</sup>	1.57 $\pm$ 0.04 <sup>CDE</sup>
Cys	0.007 $\pm$ 0.001 <sup>BCD</sup>	0.008 $\pm$ 0.000 <sup>B</sup>	0.003 $\pm$ 0.000 <sup>D</sup>	0.007 $\pm$ 0.001 <sup>BC</sup>	0.006 $\pm$ 0.002 <sup>BCD</sup>	0.013 $\pm$ 0.004 <sup>A</sup>	0.004 $\pm$ 0.001 <sup>BCD</sup>	0.005 $\pm$ 0.001 <sup>BCD</sup>	0.003 $\pm$ 0.001 <sup>CD</sup>	0.008 $\pm$ 0.001 <sup>BC</sup>
Gln	1.89 $\pm$ 0.12 <sup>A</sup>	1.61 $\pm$ 0.09 <sup>B</sup>	1.10 $\pm$ 0.09 <sup>CD</sup>	1.16 $\pm$ 0.04 <sup>CD</sup>	0.77 $\pm$ 0.02 <sup>EF</sup>	1.00 $\pm$ 0.08 <sup>DE</sup>	0.65 $\pm$ 0.04 <sup>F</sup>	1.92 $\pm$ 0.08 <sup>A</sup>	1.00 $\pm$ 0.14 <sup>DE</sup>	1.32 $\pm$ 0.08 <sup>C</sup>
Glu	6.68 $\pm$ 0.36 <sup>A</sup>	5.45 $\pm$ 0.26 <sup>B</sup>	4.03 $\pm$ 0.31 <sup>C</sup>	5.41 $\pm$ 0.37 <sup>B</sup>	3.89 $\pm$ 0.21 <sup>C</sup>	5.65 $\pm$ 0.23 <sup>B</sup>	4.22 $\pm$ 0.35 <sup>C</sup>	5.70 $\pm$ 0.24 <sup>B</sup>	3.94 $\pm$ 0.26 <sup>C</sup>	5.99 $\pm$ 0.33 <sup>AB</sup>
Gly	0.68 $\pm$ 0.07 <sup>A</sup>	0.32 $\pm$ 0.03 <sup>C</sup>	0.16 $\pm$ 0.01 <sup>D</sup>	0.24 $\pm$ 0.02 <sup>CD</sup>	0.16 $\pm$ 0.02 <sup>D</sup>	0.22 $\pm$ 0.02 <sup>D</sup>	0.15 $\pm$ 0.03 <sup>D</sup>	0.47 $\pm$ 0.02 <sup>B</sup>	0.23 $\pm$ 0.03 <sup>CD</sup>	0.48 $\pm$ 0.03 <sup>B</sup>
His	0.047 $\pm$ 0.002 <sup>BCD</sup>	0.059 $\pm$ 0.004 <sup>A</sup>	0.053 $\pm$ 0.004 <sup>B</sup>	0.042 $\pm$ 0.001 <sup>DE</sup>	0.037 $\pm$ 0.001 <sup>EF</sup>	0.033 $\pm$ 0.001 <sup>F</sup>	0.035 $\pm$ 0.001 <sup>EF</sup>	0.049 $\pm$ 0.001 <sup>BC</sup>	0.043 $\pm$ 0.004 <sup>CD</sup>	0.040 $\pm$ 0.002 <sup>DE</sup>
Ile	0.024 $\pm$ 0.002 <sup>E</sup>	0.027 $\pm$ 0.002 <sup>BCDE</sup>	0.025 $\pm$ 0.002 <sup>DE</sup>	0.031 $\pm$ 0.003 <sup>BC</sup>	0.029 $\pm$ 0.001 <sup>BCD</sup>	0.031 $\pm$ 0.001 <sup>B</sup>	0.037 $\pm$ 0.001 <sup>A</sup>	0.024 $\pm$ 0.000 <sup>E</sup>	0.024 $\pm$ 0.002 <sup>DE</sup>	0.026 $\pm$ 0.001 <sup>CDE</sup>
Leu	0.031 $\pm$ 0.001 <sup>D</sup>	0.042 $\pm$ 0.003 <sup>AB</sup>	0.043 $\pm$ 0.004 <sup>AB</sup>	0.046 $\pm$ 0.005 <sup>A</sup>	0.038 $\pm$ 0.001 <sup>BC</sup>	0.038 $\pm$ 0.002 <sup>BC</sup>	0.042 $\pm$ 0.001 <sup>AB</sup>	0.032 $\pm$ 0.001 <sup>CD</sup>	0.032 $\pm$ 0.001 <sup>CD</sup>	0.030 $\pm$ 0.001 <sup>D</sup>
Lys	0.056 $\pm$ 0.002 <sup>D</sup>	0.070 $\pm$ 0.006 <sup>ABC</sup>	0.064 $\pm$ 0.005 <sup>BCD</sup>	0.076 $\pm$ 0.007 <sup>A</sup>	0.073 $\pm$ 0.002 <sup>AB</sup>	0.069 $\pm$ 0.003 <sup>ABC</sup>	0.075 $\pm$ 0.002 <sup>A</sup>	0.057 $\pm$ 0.002 <sup>D</sup>	0.060 $\pm$ 0.005 <sup>CD</sup>	0.061 $\pm$ 0.002 <sup>CD</sup>
Met	0.037 $\pm$ 0.002 <sup>AB</sup>	0.032 $\pm$ 0.001 <sup>BCD</sup>	0.033 $\pm$ 0.002 <sup>BCD</sup>	0.033 $\pm$ 0.002 <sup>BC</sup>	0.025 $\pm$ 0.001 <sup>EF</sup>	0.027 $\pm$ 0.001 <sup>DEF</sup>	0.024 $\pm$ 0.001 <sup>F</sup>	0.039 $\pm$ 0.001 <sup>A</sup>	0.034 $\pm$ 0.004 <sup>ABC</sup>	0.030 $\pm$ 0.002 <sup>CDE</sup>
Phe	0.048 $\pm$ 0.001 <sup>D</sup>	0.067 $\pm$ 0.005 <sup>A</sup>	0.064 $\pm$ 0.003 <sup>AB</sup>	0.064 $\pm$ 0.004 <sup>AB</sup>	0.062 $\pm$ 0.000 <sup>ABC</sup>	0.058 $\pm$ 0.001 <sup>BC</sup>	0.057 $\pm$ 0.001 <sup>C</sup>	0.049 $\pm$ 0.001 <sup>D</sup>	0.048 $\pm$ 0.001 <sup>D</sup>	0.044 $\pm$ 0.002 <sup>D</sup>
Pro	0.28 $\pm$ 0.02 <sup>BC</sup>	0.34 $\pm$ 0.02 <sup>AB</sup>	0.23 $\pm$ 0.02 <sup>CD</sup>	0.36 $\pm$ 0.03 <sup>A</sup>	0.21 $\pm$ 0.02 <sup>D</sup>	0.33 $\pm$ 0.02 <sup>AB</sup>	0.20 $\pm$ 0.03 <sup>D</sup>	0.34 $\pm$ 0.02 <sup>AB</sup>	0.18 $\pm$ 0.02 <sup>D</sup>	0.20 $\pm$ 0.01 <sup>D</sup>
Ser	0.97 $\pm$ 0.09 <sup>A</sup>	0.72 $\pm$ 0.03 <sup>B</sup>	0.29 $\pm$ 0.03 <sup>DE</sup>	0.34 $\pm$ 0.01 <sup>DE</sup>	0.21 $\pm$ 0.01 <sup>E</sup>	0.42 $\pm$ 0.06 <sup>CD</sup>	0.27 $\pm$ 0.03 <sup>E</sup>	1.01 $\pm$ 0.08 <sup>A</sup>	0.49 $\pm$ 0.04 <sup>C</sup>	0.78 $\pm$ 0.05 <sup>B</sup>
Thr	0.67 $\pm$ 0.13 <sup>BC</sup>	0.47 $\pm$ 0.04 <sup>CD</sup>	0.21 $\pm$ 0.02 <sup>E</sup>	0.70 $\pm$ 0.07 <sup>B</sup>	0.59 $\pm$ 0.09 <sup>BCD</sup>	1.01 $\pm$ 0.04 <sup>A</sup>	0.66 $\pm$ 0.09 <sup>BC</sup>	0.45 $\pm$ 0.02 <sup>D</sup>	0.23 $\pm$ 0.08 <sup>E</sup>	0.70 $\pm$ 0.06 <sup>B</sup>
Trp	0.009 $\pm$ 0.000 <sup>A</sup>	0.010 $\pm$ 0.001 <sup>A</sup>	0.009 $\pm$ 0.001 <sup>A</sup>	0.010 $\pm$ 0.001 <sup>A</sup>	0.009 $\pm$ 0.000 <sup>A</sup>	0.009 $\pm$ 0.000 <sup>A</sup>	0.008 $\pm$ 0.000 <sup>A</sup>	0.009 $\pm$ 0.000 <sup>A</sup>	0.008 $\pm$ 0.000 <sup>A</sup>	0.008 $\pm$ 0.000 <sup>A</sup>
Tyr	0.012 $\pm$ 0.000 <sup>D</sup>	0.016 $\pm$ 0.001 <sup>A</sup>	0.016 $\pm$ 0.001 <sup>AB</sup>	0.015 $\pm$ 0.001 <sup>ABC</sup>	0.013 $\pm$ 0.000 <sup>BCD</sup>	0.014 $\pm$ 0.001 <sup>ABCD</sup>	0.016 $\pm$ 0.001 <sup>A</sup>	0.012 $\pm$ 0.000 <sup>D</sup>	0.014 $\pm$ 0.001 <sup>ABCD</sup>	0.013 $\pm$ 0.000 <sup>CD</sup>
Val	0.109 $\pm$ 0.002 <sup>BCD</sup>	0.131 $\pm$ 0.011 <sup>A</sup>	0.117 $\pm$ 0.008 <sup>AB</sup>	0.117 $\pm$ 0.008 <sup>AB</sup>	0.095 $\pm$ 0.002 <sup>D</sup>	0.100 $\pm$ 0.002 <sup>CD</sup>	0.106 $\pm$ 0.004 <sup>BCD</sup>	0.112 $\pm$ 0.003 <sup>BC</sup>	0.104 $\pm$ 0.002 <sup>BCD</sup>	0.105 $\pm$ 0.003 <sup>BCD</sup>
Asp-derived <sup>a</sup>	0.79 $\pm$ 0.14 <sup>BC</sup>	0.60 $\pm$ 0.04 <sup>CD</sup>	0.33 $\pm$ 0.02 <sup>E</sup>	0.84 $\pm$ 0.07 <sup>B</sup>	0.71 $\pm$ 0.09 <sup>BCD</sup>	1.13 $\pm$ 0.04 <sup>A</sup>	0.79 $\pm$ 0.09 <sup>BC</sup>	0.57 $\pm$ 0.02 <sup>D</sup>	0.34 $\pm$ 0.09 <sup>E</sup>	0.82 $\pm$ 0.06 <sup>B</sup>
Total <sup>b</sup>	14.6 $\pm$ 0.7 <sup>A</sup>	12.6 $\pm$ 0.5 <sup>BC</sup>	9.2 $\pm$ 0.6 <sup>D</sup>	11.7 $\pm$ 0.7 <sup>C</sup>	8.3 $\pm$ 0.4 <sup>D</sup>	11.5 $\pm$ 0.4 <sup>C</sup>	8.9 $\pm$ 0.6 <sup>D</sup>	13.3 $\pm$ 0.4 <sup>AB</sup>	8.6 $\pm$ 0.6 <sup>D</sup>	12.4 $\pm$ 0.5 <sup>BC</sup>

<sup>a</sup>Asp-derived amino acids refer to the total amount of Ile, Lys, Met, and Thr.

<sup>b</sup>Total amino acids refer to the total amount of 20 standard amino acids in this table.

**Supplemental Table S3. Leaf free amino acid contents in two-week-old plants**

Data are presented as mean ± SE (n = 5). Values not connected by the same letter are significantly different (Student's *t*-test, *p* < 0.05). Values connected by the same letter are not significantly different.

Amino acid (μmol/g FW) <sup>a</sup>	Col WT	<i>ak1-1</i>	<i>ak2-1</i>	<i>ak3-1</i>	<i>ak-hsdh1-1</i>	<i>ak-hsdh2-1</i>	<i>ak-hsdh2-2</i>	<i>ak-hsdh2-1 ak1-1</i>	<i>ak-hsdh2-1 ak2-1</i>	<i>ak-hsdh2-1 ak3-1</i>
Ala	1.74 ± 0.12 <sup>A</sup>	1.58 ± 0.08 <sup>AB</sup>	0.92 ± 0.16 <sup>E</sup>	1.31 ± 0.22 <sup>BCD</sup>	1.41 ± 0.10 <sup>ABC</sup>	1.01 ± 0.18 <sup>DE</sup>	1.25 ± 0.07 <sup>BCDE</sup>	1.35 ± 0.12 <sup>ABCD</sup>	1.11 ± 0.15 <sup>CDE</sup>	1.34 ± 0.06 <sup>BCD</sup>
Arg	0.109 ± 0.014 <sup>AB</sup>	0.075 ± 0.006 <sup>CD</sup>	0.071 ± 0.007 <sup>CD</sup>	0.084 ± 0.014 <sup>BCD</sup>	0.107 ± 0.002 <sup>AB</sup>	0.065 ± 0.006 <sup>D</sup>	0.084 ± 0.007 <sup>BCD</sup>	0.111 ± 0.009 <sup>AB</sup>	0.096 ± 0.013 <sup>ABC</sup>	0.126 ± 0.019 <sup>A</sup>
Asn	0.113 ± 0.019 <sup>AB</sup>	0.118 ± 0.014 <sup>AB</sup>	0.114 ± 0.012 <sup>AB</sup>	0.110 ± 0.005 <sup>ABC</sup>	0.127 ± 0.007 <sup>A</sup>	0.091 ± 0.008 <sup>BCD</sup>	0.078 ± 0.010 <sup>CD</sup>	0.090 ± 0.012 <sup>BCD</sup>	0.076 ± 0.012 <sup>D</sup>	0.114 ± 0.014 <sup>AB</sup>
Asp	0.80 ± 0.06 <sup>BCD</sup>	0.95 ± 0.07 <sup>A</sup>	0.96 ± 0.04 <sup>A</sup>	0.97 ± 0.04 <sup>A</sup>	0.86 ± 0.05 <sup>ABC</sup>	0.93 ± 0.03 <sup>AB</sup>	0.75 ± 0.05 <sup>CD</sup>	0.72 ± 0.03 <sup>D</sup>	0.74 ± 0.03 <sup>CD</sup>	0.78 ± 0.05 <sup>CD</sup>
Cys	0.010 ± 0.001 <sup>A</sup>	0.007 ± 0.001 <sup>CD</sup>	0.007 ± 0.001 <sup>CD</sup>	0.004 ± 0.001 <sup>D</sup>	0.007 ± 0.001 <sup>ABC</sup>	0.008 ± 0.001 <sup>ABC</sup>	0.007 ± 0.001 <sup>BCD</sup>	0.007 ± 0.001 <sup>ABCD</sup>	0.006 ± 0.002 <sup>CD</sup>	0.010 ± 0.001 <sup>AB</sup>
Gln	1.16 ± 0.12 <sup>BC</sup>	1.30 ± 0.10 <sup>B</sup>	1.88 ± 0.22 <sup>A</sup>	1.14 ± 0.09 <sup>BCD</sup>	1.13 ± 0.03 <sup>BCD</sup>	0.81 ± 0.07 <sup>DE</sup>	0.66 ± 0.09 <sup>E</sup>	0.70 ± 0.10 <sup>E</sup>	0.63 ± 0.06 <sup>E</sup>	0.94 ± 0.16 <sup>CDE</sup>
Glu	4.66 ± 0.72 <sup>C</sup>	6.07 ± 0.39 <sup>ABC</sup>	5.71 ± 0.45 <sup>ABC</sup>	7.03 ± 0.44 <sup>A</sup>	6.17 ± 0.54 <sup>ABC</sup>	6.67 ± 0.47 <sup>AB</sup>	5.81 ± 0.68 <sup>ABC</sup>	4.55 ± 0.30 <sup>C</sup>	5.69 ± 0.80 <sup>ABC</sup>	5.14 ± 0.77 <sup>BC</sup>
Gly	0.23 ± 0.03 <sup>BC</sup>	0.37 ± 0.03 <sup>A</sup>	0.23 ± 0.03 <sup>BC</sup>	0.24 ± 0.04 <sup>BC</sup>	0.27 ± 0.02 <sup>B</sup>	0.19 ± 0.01 <sup>C</sup>	0.21 ± 0.04 <sup>BC</sup>	0.19 ± 0.02 <sup>BC</sup>	0.17 ± 0.01 <sup>C</sup>	0.24 ± 0.03 <sup>BC</sup>
His	0.062 ± 0.002 <sup>A</sup>	0.049 ± 0.002 <sup>B</sup>	0.039 ± 0.002 <sup>CD</sup>	0.040 ± 0.004 <sup>BCD</sup>	0.040 ± 0.002 <sup>CD</sup>	0.032 ± 0.002 <sup>D</sup>	0.034 ± 0.003 <sup>D</sup>	0.044 ± 0.002 <sup>BC</sup>	0.040 ± 0.003 <sup>BCD</sup>	0.058 ± 0.007 <sup>A</sup>
Ile	0.176 ± 0.005 <sup>A</sup>	0.068 ± 0.005 <sup>DEF</sup>	0.043 ± 0.004 <sup>F</sup>	0.079 ± 0.018 <sup>CDE</sup>	0.099 ± 0.004 <sup>C</sup>	0.063 ± 0.007 <sup>EF</sup>	0.094 ± 0.005 <sup>CD</sup>	0.138 ± 0.005 <sup>B</sup>	0.100 ± 0.02 <sup>C</sup>	0.155 ± 0.013 <sup>AB</sup>
Leu	0.305 ± 0.004 <sup>A</sup>	0.138 ± 0.008 <sup>CDE</sup>	0.085 ± 0.011 <sup>E</sup>	0.142 ± 0.035 <sup>CD</sup>	0.184 ± 0.007 <sup>C</sup>	0.106 ± 0.016 <sup>DE</sup>	0.172 ± 0.009 <sup>C</sup>	0.249 ± 0.011 <sup>B</sup>	0.186 ± 0.035 <sup>B</sup>	0.277 ± 0.022 <sup>AB</sup>
Lys	0.31 ± 0.01 <sup>A</sup>	0.22 ± 0.01 <sup>BC</sup>	0.10 ± 0.02 <sup>E</sup>	0.17 ± 0.04 <sup>CD</sup>	0.21 ± 0.01 <sup>BC</sup>	0.13 ± 0.02 <sup>DE</sup>	0.21 ± 0.01 <sup>C</sup>	0.27 ± 0.01 <sup>AB</sup>	0.22 ± 0.04 <sup>BC</sup>	0.30 ± 0.03 <sup>A</sup>
Met	0.070 ± 0.002 <sup>A</sup>	0.046 ± 0.003 <sup>CDE</sup>	0.032 ± 0.003 <sup>F</sup>	0.047 ± 0.007 <sup>CD</sup>	0.050 ± 0.002 <sup>CD</sup>	0.034 ± 0.003 <sup>EF</sup>	0.047 ± 0.003 <sup>CD</sup>	0.058 ± 0.003 <sup>BC</sup>	0.045 ± 0.007 <sup>DE</sup>	0.063 ± 0.005 <sup>AB</sup>
Phe	0.215 ± 0.005 <sup>A</sup>	0.126 ± 0.007 <sup>DE</sup>	0.086 ± 0.008 <sup>F</sup>	0.117 ± 0.021 <sup>DEF</sup>	0.143 ± 0.005 <sup>CD</sup>	0.093 ± 0.011 <sup>EF</sup>	0.135 ± 0.006 <sup>D</sup>	0.177 ± 0.006 <sup>BC</sup>	0.129 ± 0.024 <sup>D</sup>	0.191 ± 0.011 <sup>AB</sup>
Pro	0.54 ± 0.02 <sup>A</sup>	0.32 ± 0.03 <sup>C</sup>	0.44 ± 0.03 <sup>B</sup>	0.51 ± 0.04 <sup>AB</sup>	0.51 ± 0.04 <sup>AB</sup>	0.46 ± 0.05 <sup>AB</sup>	0.45 ± 0.04 <sup>AB</sup>	0.47 ± 0.03 <sup>AB</sup>	0.44 ± 0.03 <sup>B</sup>	0.48 ± 0.03 <sup>AB</sup>
Ser	0.59 ± 0.05 <sup>A</sup>	0.38 ± 0.04 <sup>BC</sup>	0.40 ± 0.04 <sup>BC</sup>	0.30 ± 0.02 <sup>CD</sup>	0.38 ± 0.03 <sup>BC</sup>	0.24 ± 0.02 <sup>D</sup>	0.29 ± 0.02 <sup>CD</sup>	0.44 ± 0.05 <sup>B</sup>	0.34 ± 0.06 <sup>BCD</sup>	0.42 ± 0.04 <sup>B</sup>
Thr	0.86 ± 0.05 <sup>A</sup>	0.33 ± 0.03 <sup>C</sup>	0.35 ± 0.04 <sup>C</sup>	0.58 ± 0.06 <sup>B</sup>	0.83 ± 0.09 <sup>A</sup>	0.65 ± 0.06 <sup>B</sup>	0.72 ± 0.05 <sup>AB</sup>	0.74 ± 0.07 <sup>AB</sup>	0.36 ± 0.05 <sup>C</sup>	0.84 ± 0.07 <sup>A</sup>
Trp	0.029 ± 0.001 <sup>A</sup>	0.017 ± 0.001 <sup>BCD</sup>	0.011 ± 0.001 <sup>E</sup>	0.016 ± 0.003 <sup>CDE</sup>	0.020 ± 0.001 <sup>BC</sup>	0.012 ± 0.001 <sup>DE</sup>	0.017 ± 0.002 <sup>BCD</sup>	0.023 ± 0.001 <sup>B</sup>	0.020 ± 0.004 <sup>BC</sup>	0.030 ± 0.003 <sup>A</sup>
Tyr	0.095 ± 0.004 <sup>A</sup>	0.047 ± 0.001 <sup>C</sup>	0.025 ± 0.004 <sup>E</sup>	0.040 ± 0.008 <sup>CD</sup>	0.051 ± 0.002 <sup>C</sup>	0.032 ± 0.005 <sup>DE</sup>	0.048 ± 0.002 <sup>C</sup>	0.069 ± 0.003 <sup>B</sup>	0.053 ± 0.009 <sup>C</sup>	0.082 ± 0.005 <sup>AB</sup>
Val	0.254 ± 0.006 <sup>A</sup>	0.117 ± 0.007 <sup>DE</sup>	0.086 ± 0.007 <sup>E</sup>	0.124 ± 0.020 <sup>CD</sup>	0.136 ± 0.005 <sup>CD</sup>	0.111 ± 0.008 <sup>DE</sup>	0.135 ± 0.010 <sup>CD</sup>	0.191 ± 0.006 <sup>B</sup>	0.155 ± 0.019 <sup>C</sup>	0.225 ± 0.018 <sup>AB</sup>
Asp-derived <sup>a</sup>	1.41 ± 0.05 <sup>A</sup>	0.66 ± 0.03 <sup>DE</sup>	0.54 ± 0.06 <sup>E</sup>	0.87 ± 0.11 <sup>CD</sup>	1.19 ± 0.10 <sup>AB</sup>	0.88 ± 0.08 <sup>CD</sup>	1.07 ± 0.06 <sup>BC</sup>	1.21 ± 0.09 <sup>AB</sup>	0.73 ± 0.12 <sup>DE</sup>	1.36 ± 0.11 <sup>A</sup>
Total <sup>b</sup>	12.3 ± 0.7 <sup>AB</sup>	12.3 ± 0.5 <sup>AB</sup>	11.7 ± 0.8 <sup>AB</sup>	13.0 ± 0.6 <sup>A</sup>	12.7 ± 0.8 <sup>AB</sup>	11.7 ± 0.4 <sup>AB</sup>	11.2 ± 1.0 <sup>AB</sup>	10.6 ± 0.5 <sup>B</sup>	10.6 ± 1.0 <sup>B</sup>	11.8 ± 1.2 <sup>AB</sup>

<sup>a</sup>Asp-derived amino acids refer to the total amount of Ile, Lys, Met, and Thr.

<sup>b</sup>Total amino acids refer to the total amount of 20 standard amino acids in this table.

**Supplemental Table S4.** Leaf free amino acid contents in three-week-old plants

Data are presented as mean  $\pm$  SE (n = 5). Values not connected by the same letter are significantly different (Student's *t*-test, *p* < 0.05). Values connected by the same letter are not significantly different.

Amino acid (μmol/g FW)	Col WT	<i>ak1-1</i>	<i>ak2-1</i>	<i>ak3-1</i>	<i>ak-hsdh1-1</i>	<i>ak-hsdh2-1</i>	<i>ak-hsdh2-2</i>	<i>ak-hsdh2-1 ak1-1</i>	<i>ak-hsdh2-1 ak2-1</i>	<i>ak-hsdh2-1 ak3-1</i>
Ala	0.93 $\pm$ 0.05 <sup>EF</sup>	1.86 $\pm$ 0.32 <sup>AB</sup>	1.93 $\pm$ 0.19 <sup>A</sup>	1.63 $\pm$ 0.17 <sup>ABC</sup>	1.39 $\pm$ 0.07 <sup>BCDE</sup>	1.43 $\pm$ 0.01 <sup>BCD</sup>	1.69 $\pm$ 0.29 <sup>ABC</sup>	1.28 $\pm$ 0.10 <sup>CDEF</sup>	0.86 $\pm$ 0.12 <sup>F</sup>	1.10 $\pm$ 0.08 <sup>DEF</sup>
Arg	0.18 $\pm$ 0.03 <sup>B</sup>	0.23 $\pm$ 0.04 <sup>AB</sup>	0.20 $\pm$ 0.02 <sup>B</sup>	0.19 $\pm$ 0.03 <sup>B</sup>	0.18 $\pm$ 0.01 <sup>B</sup>	0.23 $\pm$ 0.05 <sup>AB</sup>	0.18 $\pm$ 0.03 <sup>B</sup>	0.20 $\pm$ 0.02 <sup>B</sup>	0.31 $\pm$ 0.03 <sup>A</sup>	0.20 $\pm$ 0.02 <sup>B</sup>
Asn	0.18 $\pm$ 0.02 <sup>B</sup>	0.25 $\pm$ 0.02 <sup>AB</sup>	0.22 $\pm$ 0.01 <sup>AB</sup>	0.23 $\pm$ 0.01 <sup>AB</sup>	0.28 $\pm$ 0.04 <sup>A</sup>	0.28 $\pm$ 0.05 <sup>A</sup>	0.23 $\pm$ 0.03 <sup>AB</sup>	0.20 $\pm$ 0.02 <sup>B</sup>	0.20 $\pm$ 0.00 <sup>B</sup>	0.20 $\pm$ 0.01 <sup>B</sup>
Asp	0.97 $\pm$ 0.13 <sup>B</sup>	1.07 $\pm$ 0.08 <sup>AB</sup>	0.98 $\pm$ 0.06 <sup>B</sup>	1.19 $\pm$ 0.06 <sup>AB</sup>	1.33 $\pm$ 0.06 <sup>AB</sup>	1.19 $\pm$ 0.23 <sup>AB</sup>	1.64 $\pm$ 0.56 <sup>A</sup>	1.15 $\pm$ 0.06 <sup>AB</sup>	1.09 $\pm$ 0.04 <sup>AB</sup>	0.95 $\pm$ 0.05 <sup>B</sup>
Cys	0.006 $\pm$ 0.000 <sup>CDE</sup>	0.009 $\pm$ 0.001 <sup>BC</sup>	0.009 $\pm$ 0.001 <sup>BCD</sup>	0.008 $\pm$ 0.001 <sup>BCD</sup>	0.010 $\pm$ 0.001 <sup>AB</sup>	0.013 $\pm$ 0.002 <sup>A</sup>	0.009 $\pm$ 0.002 <sup>B</sup>	0.005 $\pm$ 0.000 <sup>DE</sup>	0.003 $\pm$ 0.001 <sup>E</sup>	0.008 $\pm$ 0.002 <sup>BCD</sup>
Gln	2.38 $\pm$ 0.24 <sup>C</sup>	3.60 $\pm$ 0.27 <sup>ABC</sup>	2.85 $\pm$ 0.13 <sup>BC</sup>	3.46 $\pm$ 0.19 <sup>ABC</sup>	3.92 $\pm$ 0.28 <sup>AB</sup>	3.98 $\pm$ 0.75 <sup>AB</sup>	4.40 $\pm$ 1.04 <sup>A</sup>	3.02 $\pm$ 0.29 <sup>BC</sup>	2.54 $\pm$ 0.32 <sup>C</sup>	2.42 $\pm$ 0.16 <sup>C</sup>
Glu	6.00 $\pm$ 0.51 <sup>ABC</sup>	4.24 $\pm$ 0.72 <sup>BC</sup>	4.12 $\pm$ 0.56 <sup>C</sup>	4.26 $\pm$ 0.64 <sup>BC</sup>	3.35 $\pm$ 0.53 <sup>C</sup>	7.35 $\pm$ 2.17 <sup>A</sup>	5.38 $\pm$ 1.13 <sup>ABC</sup>	7.11 $\pm$ 0.55 <sup>A</sup>	5.63 $\pm$ 0.69 <sup>ABC</sup>	6.88 $\pm$ 0.55 <sup>AB</sup>
Gly	0.26 $\pm$ 0.01 <sup>C</sup>	0.42 $\pm$ 0.08 <sup>BC</sup>	0.48 $\pm$ 0.03 <sup>ABC</sup>	0.36 $\pm$ 0.03 <sup>BC</sup>	0.43 $\pm$ 0.06 <sup>BC</sup>	0.68 $\pm$ 0.20 <sup>A</sup>	0.49 $\pm$ 0.07 <sup>AB</sup>	0.46 $\pm$ 0.06 <sup>ABC</sup>	0.28 $\pm$ 0.01 <sup>BC</sup>	0.43 $\pm$ 0.04 <sup>BC</sup>
His	0.055 $\pm$ 0.002 <sup>C</sup>	0.088 $\pm$ 0.004 <sup>B</sup>	0.091 $\pm$ 0.006 <sup>B</sup>	0.098 $\pm$ 0.006 <sup>AB</sup>	0.098 $\pm$ 0.006 <sup>AB</sup>	0.110 $\pm$ 0.014 <sup>A</sup>	0.096 $\pm$ 0.009 <sup>AB</sup>	0.065 $\pm$ 0.004 <sup>C</sup>	0.064 $\pm$ 0.002 <sup>C</sup>	0.058 $\pm$ 0.004 <sup>C</sup>
Ile	0.060 $\pm$ 0.002 <sup>D</sup>	0.123 $\pm$ 0.007 <sup>C</sup>	0.157 $\pm$ 0.018 <sup>BC</sup>	0.177 $\pm$ 0.007 <sup>AB</sup>	0.181 $\pm$ 0.006 <sup>AB</sup>	0.196 $\pm$ 0.003 <sup>A</sup>	0.151 $\pm$ 0.017 <sup>BC</sup>	0.071 $\pm$ 0.006 <sup>D</sup>	0.057 $\pm$ 0.002 <sup>D</sup>	0.079 $\pm$ 0.004 <sup>D</sup>
Leu	0.095 $\pm$ 0.005 <sup>C</sup>	0.253 $\pm$ 0.012 <sup>B</sup>	0.308 $\pm$ 0.027 <sup>B</sup>	0.319 $\pm$ 0.015 <sup>B</sup>	0.317 $\pm$ 0.024 <sup>B</sup>	0.400 $\pm$ 0.068 <sup>A</sup>	0.314 $\pm$ 0.034 <sup>B</sup>	0.125 $\pm$ 0.004 <sup>C</sup>	0.117 $\pm$ 0.008 <sup>C</sup>	0.126 $\pm$ 0.009 <sup>C</sup>
Lys	0.11 $\pm$ 0.01 <sup>C</sup>	0.26 $\pm$ 0.02 <sup>B</sup>	0.30 $\pm$ 0.03 <sup>B</sup>	0.31 $\pm$ 0.02 <sup>AB</sup>	0.34 $\pm$ 0.04 <sup>AB</sup>	0.41 $\pm$ 0.08 <sup>A</sup>	0.35 $\pm$ 0.04 <sup>AB</sup>	0.13 $\pm$ 0.01 <sup>C</sup>	0.13 $\pm$ 0.01 <sup>C</sup>	0.14 $\pm$ 0.01 <sup>C</sup>
Met	0.036 $\pm$ 0.004 <sup>D</sup>	0.073 $\pm$ 0.007 <sup>ABC</sup>	0.085 $\pm$ 0.010 <sup>AB</sup>	0.086 $\pm$ 0.008 <sup>A</sup>	0.074 $\pm$ 0.005 <sup>ABC</sup>	0.090 $\pm$ 0.02 <sup>A</sup>	0.095 $\pm$ 0.024 <sup>A</sup>	0.048 $\pm$ 0.003 <sup>CD</sup>	0.044 $\pm$ 0.003 <sup>CD</sup>	0.053 $\pm$ 0.003 <sup>BCD</sup>
Phe	0.086 $\pm$ 0.004 <sup>C</sup>	0.212 $\pm$ 0.006 <sup>B</sup>	0.252 $\pm$ 0.016 <sup>B</sup>	0.260 $\pm$ 0.011 <sup>AB</sup>	0.262 $\pm$ 0.013 <sup>AB</sup>	0.305 $\pm$ 0.046 <sup>A</sup>	0.249 $\pm$ 0.022 <sup>B</sup>	0.099 $\pm$ 0.005 <sup>C</sup>	0.096 $\pm$ 0.004 <sup>C</sup>	0.100 $\pm$ 0.006 <sup>C</sup>
Pro	0.55 $\pm$ 0.04 <sup>B</sup>	0.69 $\pm$ 0.04 <sup>AB</sup>	0.75 $\pm$ 0.07 <sup>AB</sup>	0.70 $\pm$ 0.05 <sup>AB</sup>	0.65 $\pm$ 0.02 <sup>B</sup>	0.70 $\pm$ 0.02 <sup>AB</sup>	0.87 $\pm$ 0.18 <sup>A</sup>	0.67 $\pm$ 0.04 <sup>AB</sup>	0.62 $\pm$ 0.07 <sup>B</sup>	0.65 $\pm$ 0.06 <sup>B</sup>
Ser	0.49 $\pm$ 0.06 <sup>D</sup>	1.19 $\pm$ 0.13 <sup>AB</sup>	1.05 $\pm$ 0.15 <sup>ABC</sup>	1.14 $\pm$ 0.11 <sup>AB</sup>	1.45 $\pm$ 0.12 <sup>A</sup>	1.04 $\pm$ 0.15 <sup>BC</sup>	1.06 $\pm$ 0.30 <sup>ABC</sup>	0.85 $\pm$ 0.09 <sup>BCD</sup>	0.69 $\pm$ 0.09 <sup>CD</sup>	0.50 $\pm$ 0.04 <sup>D</sup>
Thr	0.69 $\pm$ 0.04 <sup>CDE</sup>	0.55 $\pm$ 0.05 <sup>DEF</sup>	0.52 $\pm$ 0.05 <sup>EF</sup>	0.90 $\pm$ 0.05 <sup>BCD</sup>	1.11 $\pm$ 0.08 <sup>AB</sup>	1.48 $\pm$ 0.28 <sup>A</sup>	1.15 $\pm$ 0.25 <sup>AB</sup>	0.59 $\pm$ 0.08 <sup>CDEF</sup>	0.22 $\pm$ 0.02 <sup>F</sup>	0.94 $\pm$ 0.08 <sup>BC</sup>
Trp	0.013 $\pm$ 0.000 <sup>C</sup>	0.034 $\pm$ 0.001 <sup>B</sup>	0.038 $\pm$ 0.003 <sup>B</sup>	0.042 $\pm$ 0.003 <sup>AB</sup>	0.042 $\pm$ 0.003 <sup>AB</sup>	0.051 $\pm$ 0.009 <sup>A</sup>	0.044 $\pm$ 0.006 <sup>AB</sup>	0.018 $\pm$ 0.001 <sup>C</sup>	0.015 $\pm$ 0.001 <sup>C</sup>	0.017 $\pm$ 0.001 <sup>C</sup>
Tyr	0.025 $\pm$ 0.002 <sup>B</sup>	0.068 $\pm$ 0.007 <sup>A</sup>	0.078 $\pm$ 0.010 <sup>A</sup>	0.089 $\pm$ 0.005 <sup>A</sup>	0.079 $\pm$ 0.005 <sup>A</sup>	0.090 $\pm$ 0.019 <sup>A</sup>	0.095 $\pm$ 0.025 <sup>A</sup>	0.033 $\pm$ 0.003 <sup>B</sup>	0.029 $\pm$ 0.001 <sup>B</sup>	0.034 $\pm$ 0.002 <sup>B</sup>
Val	0.11 $\pm$ 0.00 <sup>D</sup>	0.20 $\pm$ 0.02 <sup>ABC</sup>	0.21 $\pm$ 0.03 <sup>AB</sup>	0.23 $\pm$ 0.01 <sup>A</sup>	0.20 $\pm$ 0.01 <sup>ABC</sup>	0.26 $\pm$ 0.06 <sup>A</sup>	0.24 $\pm$ 0.06 <sup>A</sup>	0.13 $\pm$ 0.01 <sup>CD</sup>	0.11 $\pm$ 0.01 <sup>D</sup>	0.13 $\pm$ 0.01 <sup>BCD</sup>
Asp-derived <sup>a</sup>	0.90 $\pm$ 0.05 <sup>EF</sup>	1.00 $\pm$ 0.07 <sup>DE</sup>	1.06 $\pm$ 0.09 <sup>DE</sup>	1.48 $\pm$ 0.06 <sup>BCD</sup>	1.70 $\pm$ 0.10 <sup>ABC</sup>	2.17 $\pm$ 0.41 <sup>A</sup>	1.75 $\pm$ 0.32 <sup>AB</sup>	0.84 $\pm$ 0.09 <sup>EF</sup>	0.45 $\pm$ 0.02 <sup>F</sup>	1.21 $\pm$ 0.09 <sup>CDE</sup>
Total <sup>b</sup>	13.2 $\pm$ 1.0 <sup>B</sup>	15.4 $\pm$ 1.5 <sup>AB</sup>	14.6 $\pm$ 0.8 <sup>AB</sup>	15.7 $\pm$ 0.8 <sup>AB</sup>	15.7 $\pm$ 0.7 <sup>AB</sup>	20.3 $\pm$ 4.0 <sup>A</sup>	18.7 $\pm$ 4.0 <sup>AB</sup>	16.2 $\pm$ 1.2 <sup>AB</sup>	13.1 $\pm$ 1.0 <sup>B</sup>	15.0 $\pm$ 0.8 <sup>AB</sup>

<sup>a</sup>Asp-derived amino acids refer to the total amount of Ile, Lys, Met, and Thr.

<sup>b</sup>Total amino acids refer to the total amount of 20 standard amino acids in this table.

**Supplemental Table S5.** Correlation coefficients and *p* values among transcript levels, AK activity, HSDH activity, free amino acid contents, and protein-bound amino acid contents and their ratios

Ten data points were used for Pearson's correlation analysis; each data point represents one genotype. Negligible or very weak ( $0 \leq |r| < 0.20$ ) and weak ( $0.20 \leq |r| < 0.40$ ) correlations are not bolded. Moderate ( $0.40 \leq |r| < 0.70$ ), strong ( $0.70 \leq |r| < 0.90$ ), and very strong ( $0.90 \leq |r| \leq 1.00$ ) correlations are in bold. To dissect the AK activity from Lys-sensitive mono-functional AKs and that from Thr-sensitive dual-functional AK-HSDHs, we measured the overall AK activity in 0 mM Lys + 0 mM Thr, 0 mM Lys + 20 mM Thr, 20 mM Lys + 0 mM Thr, and 20 mM Lys + 20 mM Thr. In the presence of 20 mM Lys, the overall AK activity is expected to be solely contributed by the two AK-HSDHs; in the presence of 20 mM Thr, the overall AK activity is anticipated to be exclusively contributed by the three AKs; in the presence 20 mM Lys and Thr, the AK activity from both AKs and AK-HSDHs are expected to be abolished.

Variable	by Variable	Correlation coefficient <i>r</i>	<i>p</i> value
<i>(AK-HSDHs+CGS1)/SAMSs</i>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.2912	0.4143
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.5564</b>	<b>0.0948</b>
<i>(AK-HSDHs+CGS1)/SAMSs</i>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.1926	0.5940
<i>(AK-HSDHs+CGS1)/SAMSs</i>	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.2721	0.4469
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>AK1</b>	<b>-0.4791</b>	<b>0.1613</b>
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK1+AK2	0.2967	0.4051
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>AK1+AK3</b>	<b>-0.4634</b>	<b>0.1774</b>
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK2	0.3855	0.2713
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK2+AK3	0.3697	0.2931
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK3	-0.0231	0.9495
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK-HSDH1	-0.1198	0.7417
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK-HSDH2	-0.1667	0.6453
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK-HSDHs	-0.1732	0.6323
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK-HSDHs+CGS1	-0.0018	0.9960
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK-HSDHs+TS1	-0.1083	0.7659
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK-HSDHs+TS1+TD1	-0.1371	0.7058
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AK-HSDHs+TS1+THAs	-0.0973	0.7892
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AKs	0.2864	0.4223
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AKs/AK-HSDHs	0.2912	0.4143
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AKs+AK-HSDHs	0.2507	0.4848
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AKs+AK-HSDHs+CGS1	0.2797	0.4339
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AKs+AK-HSDHs+DHDPSs	0.2319	0.5191
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AKs+AK-HSDHs+TS1	0.1674	0.6439
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AKs+AK-HSDHs+TS1+TD1	0.1379	0.7040
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AKs+AK-HSDHs+TS1+THAs	0.1724	0.6339
<i>(AK-HSDHs+CGS1)/SAMSs</i>	AKs+DHDPSs	0.2689	0.4526
<i>(AK-HSDHs+CGS1)/SAMSs</i>	BCAT1	0.1099	0.7624
<i>(AK-HSDHs+CGS1)/SAMSs</i>	Biosynthetic genes analyzed	0.1702	0.6383
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>Catabolic genes analyzed</b>	<b>-0.5411</b>	<b>0.1063</b>
<i>(AK-HSDHs+CGS1)/SAMSs</i>	CGS1	0.1800	0.6189
<i>(AK-HSDHs+CGS1)/SAMSs</i>	DHDPS1	-0.2646	0.4600
<i>(AK-HSDHs+CGS1)/SAMSs</i>	DHDPS2	-0.3314	0.3495
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>DHDPSs</b>	<b>-0.4230</b>	<b>0.2232</b>
<i>(AK-HSDHs+CGS1)/SAMSs</i>	DHDPSs/LKR-SDHI	-0.2546	0.4777
<i>(AK-HSDHs+CGS1)/SAMSs</i>	LKR-SDHI	0.0890	0.8069
<i>(AK-HSDHs+CGS1)/SAMSs</i>	SAMS1	-0.3500	0.3215
<i>(AK-HSDHs+CGS1)/SAMSs</i>	SAMS2	-0.2300	0.5226
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>SAMS3</b>	<b>-0.4693</b>	<b>0.1712</b>
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>SAMS4</b>	<b>-0.4198</b>	<b>0.2272</b>
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>SAMSs</b>	<b>-0.5407</b>	<b>0.1066</b>
<i>(AK-HSDHs+CGS1)/SAMSs</i>	TD1	-0.3806	0.2779
<i>(AK-HSDHs+CGS1)/SAMSs</i>	THA1	0.1947	0.5899
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>THA2</b>	<b>0.5101</b>	<b>0.1320</b>
<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>THAs</b>	<b>0.4915</b>	<b>0.1491</b>

<i>(AK-HSDHs+CGS1)/SAMSs</i>	<i>THAs+TD1</i>	-0.2685	0.4531
<i>(AK-HSDHs+CGS1)/SAMSs</i>	<i>TS1</i>	-0.0630	0.8628
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.2481	0.4895
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>-0.4137</b>	<b>0.2347</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.1354	0.7092
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i></b>	<b>0.5455</b>	<b>0.1029</b>
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>0.8325</b>	<b>0.0028</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<b><i>(AKs+DHDPSs)/LKR-SDHI</i></b>	<b>0.4646</b>	<b>0.1761</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK1</i>	0.3119	0.3803
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK1+AK2</i>	-0.1100	0.7623
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK1+AK3</i>	0.1653	0.6480
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK2</i>	-0.1716	0.6355
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK2+AK3</i>	-0.1911	0.5969
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK3</i>	-0.1530	0.6731
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>AK-HSDHI</i></b>	<b>0.6146</b>	<b>0.0586</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDH2</i>	0.0736	0.8399
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs</i>	0.3937	0.2603
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs+CGS1</i>	0.1991	0.5813
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs+TS1</i>	0.1256	0.7295
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs+TS1+TD1</i>	0.0619	0.8652
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs+TS1+THAs</i>	0.1193	0.7428
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs</i>	-0.1355	0.7089
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>AKs/AK-HSDHs</i></b>	<b>-0.4137</b>	<b>0.2347</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs</i>	-0.0382	0.9165
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+CGS1</i>	-0.0466	0.8983
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0535	0.8832
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+TS1</i>	-0.0333	0.9272
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.0677	0.8526
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.0369	0.9194
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+DHDPSs</i>	-0.1513	0.6766
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>BCAT1</i></b>	<b>0.7569</b>	<b>0.0113</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	Biosynthetic genes analyzed	-0.0499	0.8911
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	Catabolic genes analyzed	-0.0157	0.9657
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>CGS1</i>	-0.0514	0.8879
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>CGS1/SAMSs</i>	-0.1486	0.6819
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>DHDPS1</i></b>	<b>-0.5217</b>	<b>0.1220</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>DHDPS2</i>	-0.1490	0.6812
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>DHDPSs</i></b>	<b>-0.4204</b>	<b>0.2264</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>DHDPSs/LKR-SDHI</i>	0.2574	0.4728
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>LKR-SDHI</i></b>	<b>-0.4225</b>	<b>0.2239</b>
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>SAMS1</i></b>	<b>-0.7333</b>	<b>0.0158</b>
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>SAMS2</i></b>	<b>-0.6117</b>	<b>0.0602</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>SAMS3</i>	0.3691	0.2939
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>SAMS4</i>	-0.0456	0.9004
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>SAMSs</i>	-0.0138	0.9697
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>TD1</i></b>	<b>-0.5588</b>	<b>0.0932</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>THA1</i>	-0.0451	0.9016
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>THA2</i>	-0.2945	0.4088
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>THAs</i>	-0.3347	0.3445
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>THAs+TD1</i></b>	<b>-0.5990</b>	<b>0.0673</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>TS1</i>	-0.0076	0.9835
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>0.9495</b>	<b>&lt;.0001</b>
<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b><i>TS1/TD1</i></b>	<b>0.9614</b>	<b>&lt;.0001</b>
<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>TS1/THAs</i>	-0.0062	0.9865
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.2670	0.4559
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.1206	0.7400
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2184	0.5445

<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.0039	0.9916
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.2059	0.5682
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.1687	0.6412
<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.9989</b>	<b>&lt;.0001</b>
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.1986	0.5823
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK1</i>	0.0852	0.8150
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK1+AK2</i>	0.1962	0.5869
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK1+AK3</i>	-0.3488	0.3232
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK2</i>	0.1719	0.6349
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK2+AK3</i>	0.0735	0.8400
<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b><i>AK3</i></b>	<b>-0.5361</b>	<b>0.1102</b>
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK-HSDH1</i>	0.0317	0.9307
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK-HSDH2</i>	0.3835	0.2740
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK-HSDHs</i>	0.2743	0.4431
<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>0.4394</b>	<b>0.2038</b>
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK-HSDHs+TS1</i>	0.3822	0.2757
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK-HSDHs+TS1+TD1</i>	0.3861	0.2705
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AK-HSDHs+TS1+THAs</i>	0.3856	0.2711
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AKs</i>	0.0951	0.7937
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AKs/AK-HSDHs</i>	-0.2184	0.5445
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AKs+AK-HSDHs</i>	0.1709	0.6369
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AKs+AK-HSDHs+CGS1</i>	0.2836	0.4271
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	0.1882	0.6027
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AKs+AK-HSDHs+TS1</i>	0.3136	0.3776
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.3236	0.3617
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.3132	0.3782
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>AKs+DHDPSs</i>	0.1148	0.7522
<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b><i>BCAT1</i></b>	<b>-0.4809</b>	<b>0.1594</b>
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	Biosynthetic genes analyzed	0.3883	0.2675
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	Catabolic genes analyzed	0.2132	0.5543
<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b><i>CGS1</i></b>	<b>0.5328</b>	<b>0.1128</b>
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>CGS1/SAMSs</i>	0.0804	0.8253
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>DHDPS1</i>	0.2954	0.4074
<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b><i>DHDPS2</i></b>	<b>0.4690</b>	<b>0.1715</b>
<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b><i>DHDPSs</i></b>	<b>0.4815</b>	<b>0.1589</b>
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>DHDPSs/LKR-SDHI</i>	0.3612	0.3051
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>LKR-SDHI</i>	-0.2509	0.4845
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>SAMS1</i>	0.1794	0.6200
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>SAMS2</i>	0.2451	0.4949
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>SAMS3</i>	0.1560	0.6669
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>SAMS4</i>	0.1871	0.6047
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>SAMSs</i>	0.2143	0.5521
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>TD1</i>	0.3218	0.3646
<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b><i>TD1/BCAT1</i></b>	<b>0.9969</b>	<b>&lt;.0001</b>
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>THA1</i>	-0.2554	0.4763
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>THA2</i>	0.2315	0.5198
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>THAs</i>	0.2010	0.5776
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>THAs+TD1</i>	0.3526	0.3176
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>TS1</i>	0.3818	0.2763
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>TS1/(THAs+TD1)</i>	-0.1577	0.6634
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>TS1/TD1</i>	-0.2444	0.4961
<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<i>TS1/THAs</i>	0.1459	0.6875
<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	<i>AK1</i>	-0.2304	0.5219
<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b><i>AK1+AK2</i></b>	<b>0.7242</b>	<b>0.0179</b>
<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	<i>AK1+AK3</i>	-0.0715	0.8443
<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b><i>AK2</i></b>	<b>0.7459</b>	<b>0.0132</b>
<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b><i>AK2+AK3</i></b>	<b>0.7548</b>	<b>0.0116</b>

(AKs+AK-HSDHs)/AK-HSDHs	AK3	0.1720	0.6347
(AKs+AK-HSDHs)/AK-HSDHs	AK-HSDH1	<b>-0.8182</b>	<b>0.0038</b>
(AKs+AK-HSDHs)/AK-HSDHs	AK-HSDH2	<b>-0.5349</b>	<b>0.1111</b>
(AKs+AK-HSDHs)/AK-HSDHs	AK-HSDHs	<b>-0.8097</b>	<b>0.0045</b>
(AKs+AK-HSDHs)/AK-HSDHs	AK-HSDHs+CGS1	<b>-0.6860</b>	<b>0.0285</b>
(AKs+AK-HSDHs)/AK-HSDHs	AK-HSDHs+TS1	<b>-0.5580</b>	<b>0.0937</b>
(AKs+AK-HSDHs)/AK-HSDHs	AK-HSDHs+TS1+TD1	<b>-0.5412</b>	<b>0.1062</b>
(AKs+AK-HSDHs)/AK-HSDHs	AK-HSDHs+TS1+THAs	<b>-0.5455</b>	<b>0.1029</b>
(AKs+AK-HSDHs)/AK-HSDHs	AKs	<b>0.7432</b>	<b>0.0138</b>
(AKs+AK-HSDHs)/AK-HSDHs	AKs+AK-HSDHs	<b>0.5584</b>	<b>0.0934</b>
(AKs+AK-HSDHs)/AK-HSDHs	AKs+AK-HSDHs+CGS1	<b>0.4326</b>	<b>0.2118</b>
(AKs+AK-HSDHs)/AK-HSDHs	AKs+AK-HSDHs+DHDPSs	<b>0.5420</b>	<b>0.1055</b>
(AKs+AK-HSDHs)/AK-HSDHs	AKs+AK-HSDHs+TS1	0.2621	0.4645
(AKs+AK-HSDHs)/AK-HSDHs	AKs+AK-HSDHs+TS1+TD1	0.2391	0.5058
(AKs+AK-HSDHs)/AK-HSDHs	AKs+AK-HSDHs+TS1+THAs	0.2690	0.4524
(AKs+AK-HSDHs)/AK-HSDHs	AKs+DHDPSs	<b>0.7283</b>	<b>0.0169</b>
(AKs+AK-HSDHs)/AK-HSDHs	BCAT1	-0.0689	0.8501
(AKs+AK-HSDHs)/AK-HSDHs	Biosynthetic genes analyzed	0.1569	0.6651
(AKs+AK-HSDHs)/AK-HSDHs	Catabolic genes analyzed	<b>-0.7172</b>	<b>0.0196</b>
(AKs+AK-HSDHs)/AK-HSDHs	CGS1	<b>-0.4155</b>	<b>0.2324</b>
(AKs+AK-HSDHs)/AK-HSDHs	DHDPS1	0.1196	0.7420
(AKs+AK-HSDHs)/AK-HSDHs	DHDPS2	<b>-0.5194</b>	<b>0.1239</b>
(AKs+AK-HSDHs)/AK-HSDHs	DHDPSs	-0.2850	0.4248
(AKs+AK-HSDHs)/AK-HSDHs	LKR-SDHI	<b>0.6965</b>	<b>0.0252</b>
(AKs+AK-HSDHs)/AK-HSDHs	SAMS1	-0.2118	0.5569
(AKs+AK-HSDHs)/AK-HSDHs	SAMS2	0.0328	0.9283
(AKs+AK-HSDHs)/AK-HSDHs	SAMS3	<b>-0.7288</b>	<b>0.0168</b>
(AKs+AK-HSDHs)/AK-HSDHs	SAMS4	<b>-0.6735</b>	<b>0.0328</b>
(AKs+AK-HSDHs)/AK-HSDHs	SAMSs	<b>-0.7192</b>	<b>0.0191</b>
(AKs+AK-HSDHs)/AK-HSDHs	TD1	-0.2550	0.4771
(AKs+AK-HSDHs)/AK-HSDHs	THA1	0.3046	0.3921
(AKs+AK-HSDHs)/AK-HSDHs	THA2	<b>0.5020</b>	<b>0.1393</b>
(AKs+AK-HSDHs)/AK-HSDHs	THAs	<b>0.6049</b>	<b>0.0639</b>
(AKs+AK-HSDHs)/AK-HSDHs	THAs+TD1	-0.1394	0.7010
(AKs+AK-HSDHs)/AK-HSDHs	TS1	-0.3727	0.2888
(AKs+AK-HSDHs+CGS1)/SAMSs	(AKs+AK-HSDHs)/AK-HSDHs	<b>0.8844</b>	<b>0.0007</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI	0.0547	0.8807
(AKs+AK-HSDHs+CGS1)/SAMSs	(AKs+DHDPSs)/LKR-SDHI	0.2754	0.4412
(AKs+AK-HSDHs+CGS1)/SAMSs	AK1	-0.2562	0.4749
(AKs+AK-HSDHs+CGS1)/SAMSs	AK1+AK2	<b>0.8698</b>	<b>0.0011</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AK1+AK3	-0.1106	0.7611
(AKs+AK-HSDHs+CGS1)/SAMSs	AK2	<b>0.8915</b>	<b>0.0005</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AK2+AK3	<b>0.8937</b>	<b>0.0005</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AK3	0.1523	0.6745
(AKs+AK-HSDHs+CGS1)/SAMSs	AK-HSDH1	<b>-0.6160</b>	<b>0.0579</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AK-HSDH2	-0.3318	0.3490
(AKs+AK-HSDHs+CGS1)/SAMSs	AK-HSDHs	<b>-0.5621</b>	<b>0.0908</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AK-HSDHs+CGS1	<b>-0.4656</b>	<b>0.1750</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AK-HSDHs+TS1	-0.3279	0.3550
(AKs+AK-HSDHs+CGS1)/SAMSs	AK-HSDHs+TS1+TD1	-0.3282	0.3546
(AKs+AK-HSDHs+CGS1)/SAMSs	AK-HSDHs+TS1+THAs	-0.3160	0.3738
(AKs+AK-HSDHs+CGS1)/SAMSs	AKs	<b>0.8824</b>	<b>0.0007</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AKs/AK-HSDHs	<b>0.8844</b>	<b>0.0007</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AKs+AK-HSDHs	<b>0.7677</b>	<b>0.0095</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AKs+AK-HSDHs+CGS1	<b>0.6652</b>	<b>0.0358</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AKs+AK-HSDHs+DHDPSs	<b>0.7525</b>	<b>0.0120</b>
(AKs+AK-HSDHs+CGS1)/SAMSs	AKs+AK-HSDHs+TS1	<b>0.5175</b>	<b>0.1255</b>

<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	<b>0.4865</b>	<b>0.1539</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	<b>0.5224</b>	<b>0.1214</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>AKs+DHDPSs</i>	<b>0.8702</b>	<b>0.0011</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>BCAT1</i>	-0.0251	0.9450
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<b>Biosynthetic genes analyzed</b>	<b>0.4155</b>	<b>0.2324</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<b>Catabolic genes analyzed</b>	<b>-0.6893</b>	<b>0.0275</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>CGS1</i>	-0.2656	0.4583
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>DHDPS1</i>	0.0923	0.7998
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>DHDPS2</i>	-0.3925	0.2619
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>DHDPSs</i>	-0.2219	0.5377
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>DHDPSs/LKR-SDHI</i>	<b>-0.6210</b>	<b>0.0553</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>LKR-SDHI</i>	<b>0.5663</b>	<b>0.0879</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>SAMS1</i>	-0.3578	0.3100
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>SAMS2</i>	0.0119	0.9740
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>SAMS3</i>	<b>-0.6341</b>	<b>0.0490</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>SAMS4</i>	<b>-0.6120</b>	<b>0.0600</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>SAMSs</i>	<b>-0.6913</b>	<b>0.0268</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>TD1</i>	-0.2588	0.4703
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>THA1</i>	0.3062	0.3896
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>THA2</i>	<b>0.5149</b>	<b>0.1277</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>THAs</i>	<b>0.6048</b>	<b>0.0640</b>
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>THAs+TD1</i>	-0.1413	0.6971
<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<i>TS1</i>	-0.1793	0.6201
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2622	0.4643
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK1</i>	0.0456	0.9004
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK1+AK2</i>	0.3394	0.3374
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK1+AK3</i>	0.1188	0.7437
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK2</i>	0.3184	0.3699
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK2+AK3</i>	0.3271	0.3562
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK3</i>	0.0925	0.7995
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK-HSDHI</i>	<b>0.4162</b>	<b>0.2316</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK-HSDH2</i>	<b>0.6731</b>	<b>0.0329</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK-HSDHs</i>	<b>0.6729</b>	<b>0.0330</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK-HSDHs+CGS1</i>	<b>0.6737</b>	<b>0.0327</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK-HSDHs+TS1</i>	<b>0.4552</b>	<b>0.1862</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK-HSDHs+TS1+TD1</i>	<b>0.4263</b>	<b>0.2193</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AK-HSDHs+TS1+THAs</i>	<b>0.4509</b>	<b>0.1910</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AKs</i>	0.3504	0.3209
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AKs/AK-HSDHs</i>	-0.2622	0.4643
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AKs+AK-HSDHs</i>	<b>0.5409</b>	<b>0.1064</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AKs+AK-HSDHs+CGS1</i>	<b>0.6356</b>	<b>0.0483</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	<b>0.5390</b>	<b>0.1079</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AKs+AK-HSDHs+TS1</i>	<b>0.5648</b>	<b>0.0889</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	<b>0.5515</b>	<b>0.0984</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	<b>0.5611</b>	<b>0.0915</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>AKs+DHDPSs</i>	0.3527	0.3176
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>BCAT1</i>	0.2038	0.5722
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<b>Biosynthetic genes analyzed</b>	<b>0.6058</b>	<b>0.0634</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<b>Catabolic genes analyzed</b>	<b>0.4432</b>	<b>0.1995</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>CGS1</i>	<b>0.5467</b>	<b>0.1020</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>DHDPS1</i>	<b>-0.4674</b>	<b>0.1732</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>DHDPS2</i>	<b>0.4839</b>	<b>0.1565</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>DHDPSs</i>	0.0547	0.8806
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>LKR-SDHI</i>	<b>-0.7226</b>	<b>0.0182</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>SAMS1</i>	-0.2454	0.4944
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>SAMS2</i>	-0.2303	0.5221
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>SAMS3</i>	<b>0.6303</b>	<b>0.0508</b>



<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>SAMS4</i>	<b>0.4518</b>	<b>0.1899</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>SAMSs</i>	<b>0.4440</b>	<b>0.1986</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>TD1</i>	0.0553	0.8794
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>THA1</i>	<b>-0.6373</b>	<b>0.0475</b>
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>THA2</i>	-0.0002	0.9995
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>THAs</i>	-0.0633	0.8620
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>THAs+TD1</i>	0.0356	0.9223
<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<i>TS1</i>	0.2984	0.4024
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>(AK-HSDHs+CGS1)/SAMSs</i>	<b>0.4218</b>	<b>0.2247</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.1077	0.7670
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.3886	0.2672
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<b>0.6165</b>	<b>0.0577</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>0.6688</b>	<b>0.0345</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK1</i>	0.2098	0.5608
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK1+AK2</i>	<b>0.4002</b>	<b>0.2518</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK1+AK3</i>	0.1567	0.6654
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK2</i>	0.3418	0.3337
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK2+AK3</i>	0.3262	0.3577
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK3</i>	-0.0492	0.8925
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDH1</i>	0.1944	0.5905
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDH2</i>	-0.0449	0.9020
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs</i>	0.0797	0.8268
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs+CGS1</i>	-0.0530	0.8843
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs+TS1</i>	-0.1245	0.7319
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs+TS1+TD1</i>	-0.1803	0.6181
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AK-HSDHs+TS1+THAs</i>	-0.1259	0.7288
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs</i>	0.3848	0.2722
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs/AK-HSDHs</i>	0.1077	0.7670
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs</i>	<b>0.4195</b>	<b>0.2275</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+CGS1</i>	0.3552	0.3138
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	0.3956	0.2578
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+TS1</i>	0.2365	0.5107
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.1881	0.6029
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.2353	0.5128
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>AKs+DHDPSs</i>	0.3624	0.3034
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>BCAT1</i>	<b>0.7035</b>	<b>0.0232</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	Biosynthetic genes analyzed	0.1675	0.6437
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	Catabolic genes analyzed	-0.3066	0.3890
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>CGS1</i>	-0.1839	0.6110
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>CGS1/SAMSs</i>	0.1389	0.7020
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>DHDPS1</i>	<b>-0.5429</b>	<b>0.1049</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>DHDPS2</i>	-0.3105	0.3825
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>DHDPSs</i>	<b>-0.5410</b>	<b>0.1063</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>DHDPSs/LKR-SDHI</i>	-0.0486	0.8940
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>LKR-SDHI</i>	-0.1899	0.5993
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>SAMS1</i>	<b>-0.8627</b>	<b>0.0013</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>SAMS2</i>	<b>-0.6437</b>	<b>0.0446</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>SAMS3</i>	0.0980	0.7876
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>SAMS4</i>	-0.3245	0.3603
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>SAMSs</i>	-0.3053	0.3910
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>TD1</i>	<b>-0.6630</b>	<b>0.0366</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>THA1</i>	-0.0021	0.9954
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>THA2</i>	-0.0631	0.8625
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>THAs</i>	-0.0568	0.8761
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>THAs+TD1</i>	<b>-0.6545</b>	<b>0.0400</b>
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>TS1</i>	-0.1964	0.5866
<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<i>TS1/(THAs+TD1)</i>	<b>0.7899</b>	<b>0.0066</b>

$(AK_s+AK-HSDH_s+TSI)/(THA_s+TDI)$	<b>TSI/TDI</b>	<b>0.8817</b>	<b>0.0007</b>
$(AK_s+AK-HSDH_s+TSI)/(THA_s+TDI)$	<i>TSI/THA_s</i>	-0.3543	0.3152
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	$(AK-HSDH_s+CGS1)/SAMS_s$	0.2775	0.4376
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	$(AK-HSDH_s+TSI)/(THA_s+TDI)$	-0.1337	0.7127
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	$(AK_s+AK-HSDH_s)/AK-HSDH_s$	-0.1789	0.6209
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	$(AK_s+AK-HSDH_s+CGS1)/SAMS_s$	0.0433	0.9055
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	$(AK_s+AK-HSDH_s+DHDPS_s)/LKR-SDHI$	0.2117	0.5570
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	$(AK_s+AK-HSDH_s+TSI)/(THA_s+TDI)$	-0.1564	0.6661
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	$(AK_s+DHDPS_s)/LKR-SDHI$	0.2151	0.5507
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK1</i>	0.0823	0.8213
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK1+AK2</i>	0.2364	0.5108
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK1+AK3</i>	-0.3446	0.3295
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK2</i>	0.2113	0.5579
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK2+AK3</i>	0.1133	0.7552
<b><math>(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1</math></b>	<b>AK3</b>	<b>-0.5276</b>	<b>0.1171</b>
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK-HSDH1</i>	-0.0052	0.9887
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK-HSDH2</i>	0.3782	0.2812
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK-HSDH_s</i>	0.2501	0.4858
<b><math>(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1</math></b>	<b>AK-HSDH_s+CGS1</b>	<b>0.4193</b>	<b>0.2277</b>
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK-HSDH_s+TSI</i>	0.3639	0.3013
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK-HSDH_s+TSI+TDI</i>	0.3684	0.2948
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK-HSDH_s+TSI+THA_s</i>	0.3676	0.2960
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK_s</i>	0.1362	0.7075
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK_s/AK-HSDH_s</i>	-0.1789	0.6209
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK_s+AK-HSDH_s</i>	0.2072	0.5658
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK_s+AK-HSDH_s+CGS1</i>	0.3153	0.3749
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK_s+AK-HSDH_s+DHDPS_s</i>	0.2239	0.5340
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK_s+AK-HSDH_s+TSI</i>	0.3357	0.3429
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK_s+AK-HSDH_s+TSI+TDI</i>	0.3448	0.3293
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK_s+AK-HSDH_s+TSI+THA_s</i>	0.3355	0.3433
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>AK_s+DHDPS_s</i>	0.1555	0.6679
<b><math>(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1</math></b>	<b>BCAT1</b>	<b>-0.4875</b>	<b>0.1529</b>
<b><math>(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1</math></b>	<b>Biosynthetic genes analyzed</b>	<b>0.4062</b>	<b>0.2441</b>
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	Catabolic genes analyzed	0.1906	0.5978
<b><math>(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1</math></b>	<b>CGS1</b>	<b>0.5214</b>	<b>0.1222</b>
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>CGS1/SAMS_s</i>	0.1000	0.7835
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>DHDPS1</i>	0.2942	0.4093
<b><math>(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1</math></b>	<b>DHDPS2</b>	<b>0.4615</b>	<b>0.1794</b>
<b><math>(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1</math></b>	<b>DHDPS_s</b>	<b>0.4759</b>	<b>0.1644</b>
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>DHDPS_s/LKR-SDHI</i>	0.3387	0.3384
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>LKR-SDHI</i>	-0.2334	0.5163
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>SAMS1</i>	0.1710	0.6368
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>SAMS2</i>	0.2434	0.4981
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>SAMS3</i>	0.1342	0.7118
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>SAMS4</i>	0.1658	0.6472
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>SAMS_s</i>	0.1918	0.5956
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>TDI</i>	0.3153	0.3749
<b><math>(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1</math></b>	<b>TDI/BCAT1</b>	<b>0.9951</b>	<b>&lt;.0001</b>
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>THA1</i>	-0.2535	0.4797
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>THA2</i>	0.2447	0.4957
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>THA_s</i>	0.2192	0.5429
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>THA_s+TDI</i>	0.3490	0.3229
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>TSI</i>	0.3685	0.2947
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>TSI/(THA_s+TDI)</i>	-0.1695	0.6396
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>TSI/TDI</i>	-0.2516	0.4832
$(AK_s+AK-HSDH_s+TSI+TDI)/BCAT1$	<i>TSI/THA_s</i>	0.1193	0.7427
$(AK_s+DHDPS_s)/LKR-SDHI$	$(AK_s+AK-HSDH_s)/AK-HSDH_s$	-0.0237	0.9482

<i>(AKs+DHDPSs)/LKR-SDHI</i>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<b>0.9668</b>	<b>&lt;.0001</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	AK1	0.0010	0.9978
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AK1+AK2</b>	<b>0.5465</b>	<b>0.1021</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	AK1+AK3	0.0583	0.8730
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AK2</b>	<b>0.5274</b>	<b>0.1172</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AK2+AK3</b>	<b>0.5257</b>	<b>0.1186</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	AK3	0.0667	0.8548
<i>(AKs+DHDPSs)/LKR-SDHI</i>	AK-HSDH1	0.2062	0.5677
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AK-HSDH2</b>	<b>0.5464</b>	<b>0.1022</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AK-HSDHs</b>	<b>0.4723</b>	<b>0.1681</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AK-HSDHs+CGS1</b>	<b>0.5137</b>	<b>0.1288</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	AK-HSDHs+TS1	0.3169	0.3724
<i>(AKs+DHDPSs)/LKR-SDHI</i>	AK-HSDHs+TS1+TD1	0.2897	0.4168
<i>(AKs+DHDPSs)/LKR-SDHI</i>	AK-HSDHs+TS1+THAs	0.3155	0.3745
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AKs</b>	<b>0.5493</b>	<b>0.1000</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	AKs/AK-HSDHs	-0.0237	0.9482
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AKs+AK-HSDHs</b>	<b>0.6945</b>	<b>0.0258</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AKs+AK-HSDHs+CGS1</b>	<b>0.7616</b>	<b>0.0105</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>0.6882</b>	<b>0.0278</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AKs+AK-HSDHs+TS1</b>	<b>0.6417</b>	<b>0.0455</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>0.6208</b>	<b>0.0555</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AKs+AK-HSDHs+TS1+THAs</b>	<b>0.6396</b>	<b>0.0464</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>AKs+DHDPSs</b>	<b>0.5476</b>	<b>0.1013</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	BCAT1	0.2136	0.5535
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>Biosynthetic genes analyzed</b>	<b>0.6586</b>	<b>0.0384</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	Catabolic genes analyzed	0.2647	0.4598
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>CGS1</b>	<b>0.4630</b>	<b>0.1778</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>DHDPS1</b>	<b>-0.4739</b>	<b>0.1664</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	DHDPS2	0.3767	0.2833
<i>(AKs+DHDPSs)/LKR-SDHI</i>	DHDPSs	-0.0237	0.9481
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>LKR-SDHI</b>	<b>-0.5865</b>	<b>0.0747</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	SAMS1	-0.3309	0.3504
<i>(AKs+DHDPSs)/LKR-SDHI</i>	SAMS2	-0.2638	0.4614
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>SAMS3</b>	<b>0.4676</b>	<b>0.1729</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	SAMS4	0.2798	0.4336
<i>(AKs+DHDPSs)/LKR-SDHI</i>	SAMSs	0.2652	0.4590
<i>(AKs+DHDPSs)/LKR-SDHI</i>	TD1	-0.0311	0.9321
<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>THA1</b>	<b>-0.5817</b>	<b>0.0778</b>
<i>(AKs+DHDPSs)/LKR-SDHI</i>	THA2	0.1196	0.7421
<i>(AKs+DHDPSs)/LKR-SDHI</i>	THAs	0.0833	0.8190
<i>(AKs+DHDPSs)/LKR-SDHI</i>	THAs+TD1	-0.0227	0.9504
<i>(AKs+DHDPSs)/LKR-SDHI</i>	TS1	0.2062	0.5677
AK activity with four effectors	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.2184	0.5445
AK activity with four effectors	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.3801	0.2786
AK activity with four effectors	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.1930	0.5933
AK activity with four effectors	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.0592	0.8710
AK activity with four effectors	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.2710	0.4489
<b>AK activity with four effectors</b>	<b><i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i></b>	<b>0.8230</b>	<b>0.0034</b>
<b>AK activity with four effectors</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>0.5645</b>	<b>0.0891</b>
AK activity with four effectors	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.2053	0.5693
<b>AK activity with four effectors</b>	<b><i>(AKs+DHDPSs)/LKR-SDHI</i></b>	<b>0.8734</b>	<b>0.0010</b>
<b>AK activity with four effectors</b>	<b>AK activity without effectors</b>	<b>0.9147</b>	<b>0.0002</b>
AK activity with four effectors	AK1	-0.0408	0.9109
<b>AK activity with four effectors</b>	<b>AK1+AK2</b>	<b>0.5726</b>	<b>0.0836</b>
AK activity with four effectors	AK1+AK3	-0.1069	0.7689
<b>AK activity with four effectors</b>	<b>AK2</b>	<b>0.5610</b>	<b>0.0916</b>
<b>AK activity with four effectors</b>	<b>AK2+AK3</b>	<b>0.5293</b>	<b>0.1157</b>

AK activity with four effectors	AK3	-0.0979	0.7880
AK activity with four effectors	AK-HSDH1	0.2680	0.4541
AK activity with four effectors	AK-HSDH2	0.2940	0.4097
AK activity with four effectors	AK-HSDHs	0.3434	0.3313
<b>AK activity with four effectors</b>	<b>AK-HSDHs+CGS1</b>	<b>0.4753</b>	<b>0.1650</b>
AK activity with four effectors	AK-HSDHs+TS1	0.3789	0.2803
AK activity with four effectors	AK-HSDHs+TS1+TD1	0.3494	0.3224
AK activity with four effectors	AK-HSDHs+TS1+THAs	0.3846	0.2725
<b>AK activity with four effectors</b>	<b>AKs</b>	<b>0.5451</b>	<b>0.1032</b>
AK activity with four effectors	AKs/AK-HSDHs	0.0592	0.8710
<b>AK activity with four effectors</b>	<b>AKs+AK-HSDHs</b>	<b>0.6565</b>	<b>0.0392</b>
<b>AK activity with four effectors</b>	<b>AKs+AK-HSDHs+CGS1</b>	<b>0.7406</b>	<b>0.0143</b>
<b>AK activity with four effectors</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>0.6504</b>	<b>0.0417</b>
<b>AK activity with four effectors</b>	<b>AKs+AK-HSDHs+TS1</b>	<b>0.6769</b>	<b>0.0316</b>
<b>AK activity with four effectors</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>0.6552</b>	<b>0.0398</b>
<b>AK activity with four effectors</b>	<b>AKs+AK-HSDHs+TS1+THAs</b>	<b>0.6792</b>	<b>0.0308</b>
<b>AK activity with four effectors</b>	<b>AKs+DHDPSs</b>	<b>0.5432</b>	<b>0.1046</b>
AK activity with four effectors	BCAT1	0.3062	0.3896
<b>AK activity with four effectors</b>	<b>Biosynthetic genes analyzed</b>	<b>0.7012</b>	<b>0.0239</b>
AK activity with four effectors	Catabolic genes analyzed	0.2487	0.4884
<b>AK activity with four effectors</b>	<b>CGS1</b>	<b>0.5268</b>	<b>0.1177</b>
AK activity with four effectors	CGS1/SAMSs	-0.0376	0.9178
AK activity with four effectors	CGS1/TS1	0.0627	0.8635
AK activity with four effectors	DHDPS1	-0.3357	0.3430
AK activity with four effectors	DHDPS2	0.2791	0.4349
AK activity with four effectors	DHDPSs	-0.0113	0.9753
AK activity with four effectors	DHDPSs/AK-HSDHs	-0.3939	0.2600
AK activity with four effectors	DHDPSs/LKR-SDH1	0.3633	0.3021
AK activity with four effectors	HSDH activity without effectors	0.2427	0.4992
<b>AK activity with four effectors</b>	<b>LKR-SDH1</b>	<b>-0.4785</b>	<b>0.1618</b>
<b>AK activity with four effectors</b>	<b>SAMS1</b>	<b>-0.4099</b>	<b>0.2394</b>
AK activity with four effectors	SAMS2	-0.1467	0.6860
<b>AK activity with four effectors</b>	<b>SAMS3</b>	<b>0.4809</b>	<b>0.1594</b>
AK activity with four effectors	SAMS4	0.2635	0.4620
AK activity with four effectors	SAMSs	0.2470	0.4915
AK activity with four effectors	TD1	-0.0275	0.9398
AK activity with four effectors	TD1/BCAT1	0.1707	0.6373
<b>AK activity with four effectors</b>	<b>THA1</b>	<b>-0.6511</b>	<b>0.0414</b>
<b>AK activity with four effectors</b>	<b>THA2</b>	<b>0.4495</b>	<b>0.1924</b>
<b>AK activity with four effectors</b>	<b>THAs</b>	<b>0.4019</b>	<b>0.2496</b>
AK activity with four effectors	THAs+TD1	0.0485	0.8942
AK activity with four effectors	TS1	0.3439	0.3305
AK activity with four effectors	TS1/(THAs+TD1)	0.2843	0.4259
AK activity with four effectors	TS1/TD1	0.3314	0.3496
AK activity with four effectors	TS1/THAs	-0.1190	0.7433
AK activity without effectors	(AK-HSDHs+CGS1)/SAMSs	0.3012	0.3977
AK activity without effectors	(AK-HSDHs+TS1)/(THAs+TD1)	0.3830	0.2746
AK activity without effectors	(AK-HSDHs+TS1+TD1)/BCAT1	0.0250	0.9454
AK activity without effectors	(AKs+AK-HSDHs)/AK-HSDHs	0.0992	0.7850
AK activity without effectors	(AKs+AK-HSDHs+CGS1)/SAMSs	0.2758	0.4406
<b>AK activity without effectors</b>	<b>(AKs+AK-HSDHs+DHDPSs)/LKR-SDH1</b>	<b>0.6270</b>	<b>0.0523</b>
<b>AK activity without effectors</b>	<b>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>0.5190</b>	<b>0.1242</b>
AK activity without effectors	(AKs+AK-HSDHs+TS1+TD1)/BCAT1	0.0300	0.9343
<b>AK activity without effectors</b>	<b>(AKs+DHDPSs)/LKR-SDH1</b>	<b>0.6711</b>	<b>0.0336</b>
AK activity without effectors	AK1	-0.2533	0.4801
<b>AK activity without effectors</b>	<b>AK1+AK2</b>	<b>0.4593</b>	<b>0.1818</b>
AK activity without effectors	AK1+AK3	-0.2882	0.4194

<b>AK activity without effectors</b>	<b>AK2</b>	<b>0.4954</b>	<b>0.1454</b>
<b>AK activity without effectors</b>	<b>AK2+AK3</b>	<b>0.4678</b>	<b>0.1727</b>
AK activity without effectors	AK3	-0.0812	0.8234
AK activity without effectors	AK-HSDH1	0.3656	0.2988
AK activity without effectors	AK-HSDH2	0.0179	0.9609
AK activity without effectors	AK-HSDHs	0.2181	0.5449
AK activity without effectors	AK-HSDHs+CGS1	0.3713	0.2908
AK activity without effectors	AK-HSDHs+TS1	0.3669	0.2971
AK activity without effectors	AK-HSDHs+TS1+TD1	0.3317	0.3491
AK activity without effectors	AK-HSDHs+TS1+THAs	0.3766	0.2834
<b>AK activity without effectors</b>	<b>AKs</b>	<b>0.4363</b>	<b>0.2075</b>
AK activity without effectors	AKs/AK-HSDHs	0.0992	0.7850
<b>AK activity without effectors</b>	<b>AKs+AK-HSDHs</b>	<b>0.5104</b>	<b>0.1317</b>
<b>AK activity without effectors</b>	<b>AKs+AK-HSDHs+CGS1</b>	<b>0.5888</b>	<b>0.0733</b>
<b>AK activity without effectors</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>0.5008</b>	<b>0.1404</b>
<b>AK activity without effectors</b>	<b>AKs+AK-HSDHs+TS1</b>	<b>0.5813</b>	<b>0.0780</b>
<b>AK activity without effectors</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>0.5576</b>	<b>0.0940</b>
<b>AK activity without effectors</b>	<b>AKs+AK-HSDHs+TS1+THAs</b>	<b>0.5861</b>	<b>0.0749</b>
<b>AK activity without effectors</b>	<b>AKs+DHDPSs</b>	<b>0.4296</b>	<b>0.2153</b>
<b>AK activity without effectors</b>	<b>BCAT1</b>	<b>0.4539</b>	<b>0.1876</b>
<b>AK activity without effectors</b>	<b>Biosynthetic genes analyzed</b>	<b>0.6005</b>	<b>0.0664</b>
AK activity without effectors	Catabolic genes analyzed	0.1170	0.7475
<b>AK activity without effectors</b>	<b>CGS1</b>	<b>0.4636</b>	<b>0.1772</b>
AK activity without effectors	CGS1/SAMSs	0.1079	0.7666
AK activity without effectors	CGS1/TS1	-0.0495	0.8921
AK activity without effectors	DHDPS1	-0.2885	0.4188
AK activity without effectors	DHDPS2	0.0743	0.8384
AK activity without effectors	DHDPSs	-0.1312	0.7178
AK activity without effectors	DHDPSs/AK-HSDHs	-0.2823	0.4294
AK activity without effectors	DHDPSs/LKR-SDH1	0.2030	0.5738
AK activity without effectors	LKR-SDH1	-0.2997	0.4001
<b>AK activity without effectors</b>	<b>SAMS1</b>	<b>-0.4686</b>	<b>0.1719</b>
AK activity without effectors	SAMS2	-0.1066	0.7695
AK activity without effectors	SAMS3	0.3436	0.3310
AK activity without effectors	SAMS4	0.1787	0.6214
AK activity without effectors	SAMSs	0.1136	0.7547
AK activity without effectors	TD1	-0.1036	0.7758
AK activity without effectors	TD1/BCAT1	-0.0054	0.9881
<b>AK activity without effectors</b>	<b>THA1</b>	<b>-0.4482</b>	<b>0.1939</b>
<b>AK activity without effectors</b>	<b>THA2</b>	<b>0.6083</b>	<b>0.0620</b>
<b>AK activity without effectors</b>	<b>THAs</b>	<b>0.5505</b>	<b>0.0992</b>
AK activity without effectors	THAs+TD1	0.0106	0.9767
AK activity without effectors	TS1	0.3835	0.2740
AK activity without effectors	TS1/(THAs+TD1)	0.3532	0.3167
AK activity without effectors	TS1/TD1	0.3559	0.3128
AK activity without effectors	TS1/THAs	-0.2188	0.5437
AK activity/HSDH activity with four effectors	(AK-HSDHs+CGS1)/SAMSs	-0.0623	0.8643
AK activity/HSDH activity with four effectors	(AK-HSDHs+TS1)/(THAs+TD1)	0.0210	0.9541
AK activity/HSDH activity with four effectors	(AK-HSDHs+TS1+TD1)/BCAT1	-0.1737	0.6313
<b>AK activity/HSDH activity with four effectors</b>	<b>(AKs+AK-HSDHs)/AK-HSDHs</b>	<b>0.5083</b>	<b>0.1336</b>
<b>AK activity/HSDH activity with four effectors</b>	<b>(AKs+AK-HSDHs+CGS1)/SAMSs</b>	<b>0.4859</b>	<b>0.1545</b>
<b>AK activity/HSDH activity with four effectors</b>	<b>(AKs+AK-HSDHs+DHDPSs)/LKR-SDH1</b>	<b>0.4637</b>	<b>0.1771</b>
<b>AK activity/HSDH activity with four effectors</b>	<b>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>0.4147</b>	<b>0.2334</b>
AK activity/HSDH activity with four effectors	(AKs+AK-HSDHs+TS1+TD1)/BCAT1	-0.1420	0.6956
<b>AK activity/HSDH activity with four effectors</b>	<b>(AKs+DHDPSs)/LKR-SDH1</b>	<b>0.6294</b>	<b>0.0512</b>
<b>AK activity/HSDH activity with four effectors</b>	<b>AK activity with four effectors</b>	<b>0.7230</b>	<b>0.0181</b>
<b>AK activity/HSDH activity with four effectors</b>	<b>AK activity without effectors</b>	<b>0.6188</b>	<b>0.0565</b>

<b>AK activity/HSDH activity with four effectors</b>	<b>AK activity/HSDH activity without effectors</b>	<b>0.9355</b>	<b>&lt;.0001</b>
AK activity/HSDH activity with four effectors	<i>AK1</i>	-0.0347	0.9241
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AK1+AK2</i></b>	<b>0.7399</b>	<b>0.0144</b>
AK activity/HSDH activity with four effectors	<i>AK1+AK3</i>	-0.0126	0.9724
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AK2</i></b>	<b>0.7210</b>	<b>0.0186</b>
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AK2+AK3</i></b>	<b>0.7040</b>	<b>0.0231</b>
AK activity/HSDH activity with four effectors	<i>AK3</i>	0.0133	0.9709
AK activity/HSDH activity with four effectors	<i>AK-HSDH1</i>	-0.2882	0.4194
AK activity/HSDH activity with four effectors	<i>AK-HSDH2</i>	-0.0264	0.9423
AK activity/HSDH activity with four effectors	<i>AK-HSDHs</i>	-0.1807	0.6173
AK activity/HSDH activity with four effectors	<i>AK-HSDHs+CGS1</i>	-0.0745	0.8379
AK activity/HSDH activity with four effectors	<i>AK-HSDHs+TS1</i>	-0.0856	0.8141
AK activity/HSDH activity with four effectors	<i>AK-HSDHs+TS1+TD1</i>	-0.0926	0.7992
AK activity/HSDH activity with four effectors	<i>AK-HSDHs+TS1+THAs</i>	-0.0805	0.8250
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AKs</i></b>	<b>0.7300</b>	<b>0.0165</b>
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>0.5083</b>	<b>0.1336</b>
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.7104</b>	<b>0.0213</b>
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b>0.6844</b>	<b>0.0290</b>
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>0.6987</b>	<b>0.0246</b>
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>0.5411</b>	<b>0.1063</b>
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>0.5172</b>	<b>0.1258</b>
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>0.5442</b>	<b>0.1039</b>
<b>AK activity/HSDH activity with four effectors</b>	<b><i>AKs+DHDPSs</i></b>	<b>0.7216</b>	<b>0.0185</b>
AK activity/HSDH activity with four effectors	<i>BCAT1</i>	0.2989	0.4016
<b>AK activity/HSDH activity with four effectors</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4949</b>	<b>0.1459</b>
AK activity/HSDH activity with four effectors	Catabolic genes analyzed	-0.0555	0.8790
AK activity/HSDH activity with four effectors	<i>CGS1</i>	0.0606	0.8679
AK activity/HSDH activity with four effectors	<i>CGS1/SAMSs</i>	0.0289	0.9369
AK activity/HSDH activity with four effectors	<i>CGS1/TS1</i>	0.1984	0.5826
AK activity/HSDH activity with four effectors	<i>DHDPS1</i>	-0.3238	0.3614
AK activity/HSDH activity with four effectors	<i>DHDPS2</i>	0.0494	0.8921
AK activity/HSDH activity with four effectors	<i>DHDPSs</i>	-0.1476	0.6841
AK activity/HSDH activity with four effectors	<i>DHDPSs/AK-HSDHs</i>	0.1074	0.7677
AK activity/HSDH activity with four effectors	<i>DHDPSs/LKR-SDH1</i>	-0.0930	0.7982
AK activity/HSDH activity with four effectors	HSDH activity with four effectors	-0.3735	0.2877
<b>AK activity/HSDH activity with four effectors</b>	<b>HSDH activity without effectors</b>	<b>-0.4403</b>	<b>0.2028</b>
AK activity/HSDH activity with four effectors	<i>LKR-SDH1</i>	-0.0884	0.8081
AK activity/HSDH activity with four effectors	<i>SAMS1</i>	-0.3626	0.3031
AK activity/HSDH activity with four effectors	<i>SAMS2</i>	-0.1985	0.5825
AK activity/HSDH activity with four effectors	<i>SAMS3</i>	0.1163	0.7491
AK activity/HSDH activity with four effectors	<i>SAMS4</i>	-0.0533	0.8838
AK activity/HSDH activity with four effectors	<i>SAMSs</i>	-0.0576	0.8744
AK activity/HSDH activity with four effectors	<i>TD1</i>	-0.1356	0.7089
AK activity/HSDH activity with four effectors	<i>TD1/BCAT1</i>	-0.1899	0.5993
AK activity/HSDH activity with four effectors	<i>THA1</i>	-0.3911	0.2638
AK activity/HSDH activity with four effectors	<i>THA2</i>	0.3151	0.3752
AK activity/HSDH activity with four effectors	<i>THAs</i>	0.3572	0.3109
AK activity/HSDH activity with four effectors	<i>THAs+TD1</i>	-0.0757	0.8353
AK activity/HSDH activity with four effectors	<i>TS1</i>	-0.0332	0.9275
AK activity/HSDH activity with four effectors	<i>TS1/(THAs+TD1)</i>	0.0308	0.9328
AK activity/HSDH activity with four effectors	<i>TS1/TD1</i>	0.0619	0.8651
AK activity/HSDH activity with four effectors	<i>TS1/THAs</i>	-0.3809	0.2775
AK activity/HSDH activity without effectors	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.0783	0.8297
AK activity/HSDH activity without effectors	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.1170	0.7474
AK activity/HSDH activity without effectors	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.2284	0.5255
<b>AK activity/HSDH activity without effectors</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>0.6493</b>	<b>0.0422</b>
<b>AK activity/HSDH activity without effectors</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.6303</b>	<b>0.0507</b>

<b>AK activity/HSDH activity without effectors</b>	<b>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</b>	<b>0.4170</b>	<b>0.2306</b>
AK activity/HSDH activity without effectors	(AKs+AK-HSDHs+TS1)/(THAs+TD1)	0.3560	0.3127
AK activity/HSDH activity without effectors	(AKs+AK-HSDHs+TS1+TD1)/BCAT1	-0.1900	0.5990
<b>AK activity/HSDH activity without effectors</b>	<b>(AKs+DHDPSs)/LKR-SDHI</b>	<b>0.6019</b>	<b>0.0656</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AK activity with four effectors</b>	<b>0.5956</b>	<b>0.0692</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AK activity without effectors</b>	<b>0.4796</b>	<b>0.1607</b>
AK activity/HSDH activity without effectors	AK1	-0.2059	0.5683
<b>AK activity/HSDH activity without effectors</b>	<b>AK1+AK2</b>	<b>0.7770</b>	<b>0.0082</b>
AK activity/HSDH activity without effectors	AK1+AK3	0.0294	0.9357
<b>AK activity/HSDH activity without effectors</b>	<b>AK2</b>	<b>0.7924</b>	<b>0.0063</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AK2+AK3</b>	<b>0.8173</b>	<b>0.0039</b>
AK activity/HSDH activity without effectors	AK3	0.2678	0.4544
<b>AK activity/HSDH activity without effectors</b>	<b>AK-HSDHI</b>	<b>-0.4704</b>	<b>0.1700</b>
AK activity/HSDH activity without effectors	AK-HSDH2	0.0218	0.9524
AK activity/HSDH activity without effectors	AK-HSDHs	-0.2527	0.4812
AK activity/HSDH activity without effectors	AK-HSDHs+CGS1	-0.1290	0.7226
AK activity/HSDH activity without effectors	AK-HSDHs+TS1	-0.1602	0.6585
AK activity/HSDH activity without effectors	AK-HSDHs+TS1+TD1	-0.1559	0.6670
AK activity/HSDH activity without effectors	AK-HSDHs+TS1+THAs	-0.1545	0.6700
<b>AK activity/HSDH activity without effectors</b>	<b>AKs</b>	<b>0.8125</b>	<b>0.0043</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AKs/AK-HSDHs</b>	<b>0.6493</b>	<b>0.0422</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AKs+AK-HSDHs</b>	<b>0.7770</b>	<b>0.0082</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AKs+AK-HSDHs+CGS1</b>	<b>0.7417</b>	<b>0.0141</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>0.7644</b>	<b>0.0100</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AKs+AK-HSDHs+TS1</b>	<b>0.5623</b>	<b>0.0906</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>0.5418</b>	<b>0.1057</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AKs+AK-HSDHs+TS1+THAs</b>	<b>0.5654</b>	<b>0.0885</b>
<b>AK activity/HSDH activity without effectors</b>	<b>AKs+DHDPSs</b>	<b>0.8035</b>	<b>0.0051</b>
AK activity/HSDH activity without effectors	BCAT1	0.1217	0.7377
<b>AK activity/HSDH activity without effectors</b>	<b>Biosynthetic genes analyzed</b>	<b>0.5096</b>	<b>0.1324</b>
AK activity/HSDH activity without effectors	Catabolic genes analyzed	-0.1611	0.6565
AK activity/HSDH activity without effectors	CGS1	0.0362	0.9208
AK activity/HSDH activity without effectors	CGS1/SAMSs	0.1852	0.6085
AK activity/HSDH activity without effectors	CGS1/TS1	0.3241	0.3609
AK activity/HSDH activity without effectors	DHDPS1	-0.3107	0.3822
AK activity/HSDH activity without effectors	DHDPS2	0.0277	0.9394
AK activity/HSDH activity without effectors	DHDPSs	-0.1571	0.6647
AK activity/HSDH activity without effectors	DHDPSs/AK-HSDHs	0.2248	0.5323
AK activity/HSDH activity without effectors	DHDPSs/LKR-SDHI	-0.1866	0.6057
<b>AK activity/HSDH activity without effectors</b>	<b>HSDH activity with four effectors</b>	<b>-0.4401</b>	<b>0.2031</b>
<b>AK activity/HSDH activity without effectors</b>	<b>HSDH activity without effectors</b>	<b>-0.6251</b>	<b>0.0533</b>
AK activity/HSDH activity without effectors	LKR-SDHI	0.0270	0.9409
AK activity/HSDH activity without effectors	SAMS1	-0.2100	0.5604
AK activity/HSDH activity without effectors	SAMS2	-0.1162	0.7492
AK activity/HSDH activity without effectors	SAMS3	-0.0936	0.7970
AK activity/HSDH activity without effectors	SAMS4	-0.1097	0.7628
AK activity/HSDH activity without effectors	SAMSs	-0.1631	0.6526
AK activity/HSDH activity without effectors	TD1	-0.0726	0.8420
AK activity/HSDH activity without effectors	TD1/BCAT1	-0.2389	0.5062
AK activity/HSDH activity without effectors	THA1	-0.2968	0.4049
AK activity/HSDH activity without effectors	THA2	0.3350	0.3440
AK activity/HSDH activity without effectors	THAs	0.3930	0.2613
AK activity/HSDH activity without effectors	THAs+TD1	-0.0111	0.9757
AK activity/HSDH activity without effectors	TS1	-0.0992	0.7851
AK activity/HSDH activity without effectors	TS1/(THAs+TD1)	-0.1284	0.7237
AK activity/HSDH activity without effectors	TS1/TD1	-0.0340	0.9258
<b>AK activity/HSDH activity without effectors</b>	<b>TS1/THAs</b>	<b>-0.4554</b>	<b>0.1859</b>

<i>AK1+AK2</i>	<i>AK1</i>	-0.0680	0.8520
<i>AK1+AK2</i>	<i>AK1+AK3</i>	-0.0534	0.8836
<b><i>AK1+AK2</i></b>	<b><i>AK2</i></b>	<b>0.9782</b>	<b>&lt;.0001</b>
<b><i>AK1+AK2</i></b>	<b><i>AK2+AK3</i></b>	<b>0.9525</b>	<b>&lt;.0001</b>
<i>AK1+AK2</i>	<i>AK3</i>	0.0015	0.9968
<b><i>AK1+AK2</i></b>	<b><i>AK-HSDH1</i></b>	<b>-0.4794</b>	<b>0.1610</b>
<i>AK1+AK2</i>	<i>AK-HSDH2</i>	-0.0490	0.8931
<i>AK1+AK2</i>	<i>AK-HSDHs</i>	-0.3003	0.3993
<b><i>AK1+AK2</i></b>	<b><i>AKs</i></b>	<b>0.9833</b>	<b>&lt;.0001</b>
<b><i>AK1+AK2</i></b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.9418</b>	<b>&lt;.0001</b>
<i>AK1+AK2</i>	<i>BCAT1</i>	-0.0566	0.8765
<b><i>AK1+AK2</i></b>	<b>Biosynthetic genes analyzed</b>	<b>0.6795</b>	<b>0.0307</b>
<i>AK1+AK2</i>	Catabolic genes analyzed	-0.3384	0.3389
<i>AK1+AK2</i>	<i>CGS1</i>	-0.0341	0.9255
<i>AK1+AK2</i>	<i>DHDPS1</i>	0.1032	0.7766
<i>AK1+AK2</i>	<i>DHDPS2</i>	-0.0303	0.9339
<i>AK1+AK2</i>	<i>DHDPSs</i>	0.0433	0.9055
<i>AK1+AK2</i>	<i>LKR-SDH1</i>	0.2791	0.4348
<i>AK1+AK2</i>	<i>SAMS1</i>	-0.3232	0.3623
<i>AK1+AK2</i>	<i>SAMS2</i>	0.0725	0.8423
<i>AK1+AK2</i>	<i>SAMS3</i>	-0.2420	0.5005
<i>AK1+AK2</i>	<i>SAMS4</i>	-0.3061	0.3897
<i>AK1+AK2</i>	<i>SAMSs</i>	-0.3406	0.3355
<i>AK1+AK2</i>	<i>TD1</i>	-0.0540	0.8822
<i>AK1+AK2</i>	<i>THA1</i>	-0.0483	0.8946
<b><i>AK1+AK2</i></b>	<b><i>THA2</i></b>	<b>0.4729</b>	<b>0.1675</b>
<b><i>AK1+AK2</i></b>	<b><i>THAs</i></b>	<b>0.5505</b>	<b>0.0991</b>
<i>AK1+AK2</i>	<i>THAs+TD1</i>	0.0430	0.9062
<i>AK1+AK2</i>	<i>TS1</i>	0.0410	0.9105
<b><i>AK1+AK3</i></b>	<b><i>AK1</i></b>	<b>0.6618</b>	<b>0.0371</b>
<i>AK1+AK3</i>	<i>AK2</i>	-0.1891	0.6008
<i>AK1+AK3</i>	<i>AK2+AK3</i>	-0.0955	0.7930
<b><i>AK1+AK3</i></b>	<b><i>AK3</i></b>	<b>0.4923</b>	<b>0.1483</b>
<i>AK1+AK3</i>	<i>AK-HSDH1</i>	0.0220	0.9520
<i>AK1+AK3</i>	<i>AK-HSDH2</i>	0.3268	0.3568
<i>AK1+AK3</i>	<i>AK-HSDHs</i>	0.2214	0.5387
<i>AK1+AK3</i>	<i>AKs</i>	0.0389	0.9151
<i>AK1+AK3</i>	<i>AKs+AK-HSDHs</i>	0.0991	0.7853
<i>AK1+AK3</i>	<i>BCAT1</i>	-0.1057	0.7714
<i>AK1+AK3</i>	Biosynthetic genes analyzed	-0.0406	0.9114
<i>AK1+AK3</i>	Catabolic genes analyzed	0.1867	0.6055
<i>AK1+AK3</i>	<i>CGS1</i>	-0.3729	0.2885
<i>AK1+AK3</i>	<i>DHDPS1</i>	0.1550	0.6689
<i>AK1+AK3</i>	<i>DHDPS2</i>	0.0697	0.8482
<i>AK1+AK3</i>	<i>DHDPSs</i>	0.1743	0.6301
<i>AK1+AK3</i>	<i>LKR-SDH1</i>	0.0119	0.9740
<i>AK1+AK3</i>	<i>SAMS1</i>	0.0325	0.9289
<i>AK1+AK3</i>	<i>SAMS2</i>	0.0787	0.8290
<i>AK1+AK3</i>	<i>SAMS3</i>	0.2206	0.5403
<i>AK1+AK3</i>	<i>SAMS4</i>	0.0927	0.7990
<i>AK1+AK3</i>	<i>SAMSs</i>	0.1884	0.6021
<i>AK1+AK3</i>	<i>TD1</i>	0.0846	0.8163
<i>AK1+AK3</i>	<i>THA1</i>	-0.1250	0.7309
<b><i>AK1+AK3</i></b>	<b><i>THA2</i></b>	<b>-0.5284</b>	<b>0.1164</b>
<b><i>AK1+AK3</i></b>	<b><i>THAs</i></b>	<b>-0.4794</b>	<b>0.1609</b>
<i>AK1+AK3</i>	<i>THAs+TD1</i>	-0.0186	0.9594
<i>AK1+AK3</i>	<i>TS1</i>	-0.1204	0.7403



AK2	AK1	-0.2735	0.4445
AK2+AK3	AK1	-0.3198	0.3677
<b>AK2+AK3</b>	<b>AK2</b>	<b>0.9848</b>	<b>&lt;.0001</b>
AK2+AK3	AK3	0.2414	0.5017
<b>AK2+AK3</b>	<b>AK-HSDH1</b>	<b>-0.4771</b>	<b>0.1632</b>
AK2+AK3	AK-HSDH2	-0.0168	0.9632
AK2+AK3	AK-HSDHs	-0.2792	0.4347
<b>AK2+AK3</b>	<b>AKs</b>	<b>0.9799</b>	<b>&lt;.0001</b>
<b>AK2+AK3</b>	<b>AKs+AK-HSDHs</b>	<b>0.9437</b>	<b>&lt;.0001</b>
AK2+AK3	BCAT1	-0.1159	0.7498
<b>AK2+AK3</b>	<b>Biosynthetic genes analyzed</b>	<b>0.7240</b>	<b>0.0179</b>
AK2+AK3	Catabolic genes analyzed	-0.3259	0.3581
AK2+AK3	CGS1	0.0420	0.9082
AK2+AK3	DHDPS1	0.0854	0.8146
AK2+AK3	DHDPS2	0.0017	0.9963
AK2+AK3	DHDPSs	0.0512	0.8882
AK2+AK3	LKR-SDH1	0.3157	0.3742
AK2+AK3	SAMS1	-0.1793	0.6202
AK2+AK3	SAMS2	0.1802	0.6183
AK2+AK3	SAMS3	-0.3204	0.3668
AK2+AK3	SAMS4	-0.2258	0.5304
AK2+AK3	SAMSs	-0.3291	0.3531
AK2+AK3	TD1	0.0526	0.8853
AK2+AK3	THA1	-0.0163	0.9644
<b>AK2+AK3</b>	<b>THA2</b>	<b>0.5458</b>	<b>0.1026</b>
<b>AK2+AK3</b>	<b>THAs</b>	<b>0.6176</b>	<b>0.0571</b>
AK2+AK3	THAs+TD1	0.1592	0.6605
AK2+AK3	TS1	0.1108	0.7606
AK3	AK1	-0.3266	0.3570
AK3	AK2	0.0693	0.8491
AK-HSDH1	AK1	0.0812	0.8236
<b>AK-HSDH1</b>	<b>AK2</b>	<b>-0.4794</b>	<b>0.1609</b>
AK-HSDH1	AK3	-0.0695	0.8486
AK-HSDH2	AK1	0.1105	0.7613
AK-HSDH2	AK2	-0.0691	0.8495
AK-HSDH2	AK3	0.2856	0.4238
AK-HSDH2	AK-HSDH1	0.3527	0.3174
AK-HSDHs	AK1	0.1181	0.7453
AK-HSDHs	AK2	-0.3135	0.3777
AK-HSDHs	AK3	0.1416	0.6964
<b>AK-HSDHs</b>	<b>AK-HSDH1</b>	<b>0.7926</b>	<b>0.0062</b>
<b>AK-HSDHs</b>	<b>AK-HSDH2</b>	<b>0.8501</b>	<b>0.0018</b>
AK-HSDHs	AKs	-0.2694	0.4516
AK-HSDHs	AKs+AK-HSDHs	-0.0160	0.9649
AK-HSDHs	BCAT1	-0.0938	0.7966
<b>AK-HSDHs</b>	<b>CGS1</b>	<b>0.6403</b>	<b>0.0461</b>
AK-HSDHs	DHDPS1	-0.0782	0.8300
<b>AK-HSDHs</b>	<b>DHDPS2</b>	<b>0.7538</b>	<b>0.0118</b>
<b>AK-HSDHs</b>	<b>LKR-SDH1</b>	<b>-0.7655</b>	<b>0.0099</b>
AK-HSDHs	SAMS1	0.2522	0.4822
AK-HSDHs	SAMS2	0.1636	0.6515
<b>AK-HSDHs</b>	<b>SAMS3</b>	<b>0.8389</b>	<b>0.0024</b>
<b>AK-HSDHs</b>	<b>SAMS4</b>	<b>0.8532</b>	<b>0.0017</b>
<b>AK-HSDHs</b>	<b>TD1</b>	<b>0.4833</b>	<b>0.1571</b>
<b>AK-HSDHs</b>	<b>THA1</b>	<b>-0.5544</b>	<b>0.0963</b>
AK-HSDHs	THA2	-0.2885	0.4188
<b>AK-HSDHs</b>	<b>TS1</b>	<b>0.5890</b>	<b>0.0732</b>

<i>AK-HSDHs+CGSI</i>	<i>AK1</i>	-0.1386	0.7026
<i>AK-HSDHs+CGSI</i>	<i>AK1+AK2</i>	-0.1944	0.5905
<i>AK-HSDHs+CGSI</i>	<i>AK1+AK3</i>	-0.0725	0.8423
<i>AK-HSDHs+CGSI</i>	<i>AK2</i>	-0.1578	0.6633
<i>AK-HSDHs+CGSI</i>	<i>AK2+AK3</i>	-0.1417	0.6961
<i>AK-HSDHs+CGSI</i>	<i>AK3</i>	0.0691	0.8496
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>AK-HSDH1</i></b>	<b>0.6701</b>	<b>0.0340</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>AK-HSDH2</i></b>	<b>0.8192</b>	<b>0.0037</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>AK-HSDHs</i></b>	<b>0.9122</b>	<b>0.0002</b>
<i>AK-HSDHs+CGSI</i>	<i>AKs</i>	-0.1790	0.6208
<i>AK-HSDHs+CGSI</i>	<i>AKs+AK-HSDHs</i>	0.0548	0.8805
<i>AK-HSDHs+CGSI</i>	<i>AKs+AK-HSDHs+CGSI</i>	0.2567	0.4739
<i>AK-HSDHs+CGSI</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	0.0733	0.8405
<i>AK-HSDHs+CGSI</i>	<i>AKs+DHDPSs</i>	-0.1579	0.6630
<i>AK-HSDHs+CGSI</i>	<i>BCAT1</i>	-0.2044	0.5711
<b><i>AK-HSDHs+CGSI</i></b>	<b>Biosynthetic genes analyzed</b>	<b>0.4934</b>	<b>0.1472</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b>Catabolic genes analyzed</b>	<b>0.8328</b>	<b>0.0028</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>CGSI</i></b>	<b>0.8988</b>	<b>0.0004</b>
<i>AK-HSDHs+CGSI</i>	<i>DHDPS1</i>	-0.1091	0.7641
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>DHDPS2</i></b>	<b>0.8102</b>	<b>0.0045</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>DHDPSs</i></b>	<b>0.4856</b>	<b>0.1548</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>LKR-SDHI</i></b>	<b>-0.7948</b>	<b>0.0060</b>
<i>AK-HSDHs+CGSI</i>	<i>SAMS1</i>	0.3476	0.3251
<i>AK-HSDHs+CGSI</i>	<i>SAMS2</i>	0.2417	0.5011
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>SAMS3</i></b>	<b>0.7589</b>	<b>0.0109</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>SAMS4</i></b>	<b>0.8784</b>	<b>0.0008</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>SAMSs</i></b>	<b>0.8326</b>	<b>0.0028</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>TD1</i></b>	<b>0.5644</b>	<b>0.0892</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>THA1</i></b>	<b>-0.7042</b>	<b>0.0230</b>
<i>AK-HSDHs+CGSI</i>	<i>THA2</i>	0.0514	0.8878
<i>AK-HSDHs+CGSI</i>	<i>THAs</i>	-0.0662	0.8558
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>THAs+TD1</i></b>	<b>0.5373</b>	<b>0.1092</b>
<b><i>AK-HSDHs+CGSI</i></b>	<b><i>TS1</i></b>	<b>0.6734</b>	<b>0.0328</b>
<i>AK-HSDHs+TS1</i>	<i>AK1</i>	-0.1502	0.6788
<i>AK-HSDHs+TS1</i>	<i>AK1+AK2</i>	-0.0710	0.8454
<i>AK-HSDHs+TS1</i>	<i>AK1+AK3</i>	-0.0166	0.9637
<i>AK-HSDHs+TS1</i>	<i>AK2</i>	-0.0375	0.9180
<i>AK-HSDHs+TS1</i>	<i>AK2+AK3</i>	-0.0101	0.9779
<i>AK-HSDHs+TS1</i>	<i>AK3</i>	0.1486	0.6820
<b><i>AK-HSDHs+TS1</i></b>	<b><i>AK-HSDH1</i></b>	<b>0.6649</b>	<b>0.0359</b>
<b><i>AK-HSDHs+TS1</i></b>	<b><i>AK-HSDH2</i></b>	<b>0.6329</b>	<b>0.0495</b>
<b><i>AK-HSDHs+TS1</i></b>	<b><i>AK-HSDHs</i></b>	<b>0.7879</b>	<b>0.0068</b>
<b><i>AK-HSDHs+TS1</i></b>	<b><i>AK-HSDHs+CGSI</i></b>	<b>0.8230</b>	<b>0.0034</b>
<i>AK-HSDHs+TS1</i>	<i>AKs</i>	-0.0431	0.9058
<i>AK-HSDHs+TS1</i>	<i>AKs+AK-HSDHs</i>	0.1626	0.6536
<i>AK-HSDHs+TS1</i>	<i>AKs+AK-HSDHs+CGSI</i>	0.3145	0.3761
<i>AK-HSDHs+TS1</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	0.1897	0.5996
<b><i>AK-HSDHs+TS1</i></b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>0.5810</b>	<b>0.0782</b>
<i>AK-HSDHs+TS1</i>	<i>AKs+DHDPSs</i>	-0.0134	0.9708
<i>AK-HSDHs+TS1</i>	<i>BCAT1</i>	-0.2235	0.5349
<b><i>AK-HSDHs+TS1</i></b>	<b>Biosynthetic genes analyzed</b>	<b>0.6660</b>	<b>0.0355</b>
<b><i>AK-HSDHs+TS1</i></b>	<b>Catabolic genes analyzed</b>	<b>0.7013</b>	<b>0.0238</b>
<b><i>AK-HSDHs+TS1</i></b>	<b><i>CGSI</i></b>	<b>0.7024</b>	<b>0.0235</b>
<i>AK-HSDHs+TS1</i>	<i>DHDPS1</i>	0.3110	0.3818
<b><i>AK-HSDHs+TS1</i></b>	<b><i>DHDPS2</i></b>	<b>0.8003</b>	<b>0.0054</b>
<b><i>AK-HSDHs+TS1</i></b>	<b><i>DHDPSs</i></b>	<b>0.7319</b>	<b>0.0161</b>
<i>AK-HSDHs+TS1</i>	<i>LKR-SDHI</i>	-0.3926	0.2618

<i>AK-HSDHs+TSI</i>	<i>SAMS1</i>	0.3351	0.3439
<i>AK-HSDHs+TSI</i>	<i>SAMS2</i>	<b>0.5872</b>	<b>0.0743</b>
<i>AK-HSDHs+TSI</i>	<i>SAMS3</i>	<b>0.5818</b>	<b>0.0777</b>
<i>AK-HSDHs+TSI</i>	<i>SAMS4</i>	<b>0.8127</b>	<b>0.0043</b>
<i>AK-HSDHs+TSI</i>	<i>SAMSs</i>	<b>0.6976</b>	<b>0.0249</b>
<i>AK-HSDHs+TSI</i>	<i>TD1</i>	<b>0.7033</b>	<b>0.0233</b>
<i>AK-HSDHs+TSI</i>	<i>THA1</i>	<b>-0.4059</b>	<b>0.2445</b>
<i>AK-HSDHs+TSI</i>	<i>THA2</i>	0.1415	0.6966
<i>AK-HSDHs+TSI</i>	<i>THAs</i>	0.0879	0.8091
<i>AK-HSDHs+TSI</i>	<i>THAs+TD1</i>	<b>0.7045</b>	<b>0.0229</b>
<i>AK-HSDHs+TSI</i>	<i>TS1</i>	<b>0.9617</b>	<b>&lt;.0001</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AK1</i>	-0.1598	0.6593
<i>AK-HSDHs+TSI+TD1</i>	<i>AK1+AK2</i>	-0.0702	0.8472
<i>AK-HSDHs+TSI+TD1</i>	<i>AK1+AK3</i>	-0.0068	0.9852
<i>AK-HSDHs+TSI+TD1</i>	<i>AK2</i>	-0.0347	0.9242
<i>AK-HSDHs+TSI+TD1</i>	<i>AK2+AK3</i>	-0.0033	0.9927
<i>AK-HSDHs+TSI+TD1</i>	<i>AK3</i>	0.1722	0.6344
<i>AK-HSDHs+TSI+TD1</i>	<i>AK-HSDH1</i>	<b>0.6305</b>	<b>0.0507</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AK-HSDH2</i>	<b>0.6458</b>	<b>0.0437</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AK-HSDHs</i>	<b>0.7769</b>	<b>0.0082</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AK-HSDHs+CGS1</i>	<b>0.8177</b>	<b>0.0039</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AK-HSDHs+TSI</i>	<b>0.9976</b>	<b>&lt;.0001</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AK-HSDHs+TSI+THAs</i>	<b>0.9974</b>	<b>&lt;.0001</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AKs</i>	-0.0381	0.9169
<i>AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs</i>	0.1651	0.6486
<i>AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs+CGS1</i>	0.3172	0.3718
<i>AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	0.1936	0.5920
<i>AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs+TSI</i>	<b>0.5837</b>	<b>0.0765</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs+TSI+TD1</i>	<b>0.6131</b>	<b>0.0595</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs+TSI+THAs</i>	<b>0.5801</b>	<b>0.0788</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>AKs+DHDPSs</i>	-0.0068	0.9851
<i>AK-HSDHs+TSI+TD1</i>	<i>BCAT1</i>	-0.2816	0.4306
<i>AK-HSDHs+TSI+TD1</i>	<b>Biosynthetic genes analyzed</b>	<b>0.6698</b>	<b>0.0341</b>
<i>AK-HSDHs+TSI+TD1</i>	<b>Catabolic genes analyzed</b>	<b>0.7163</b>	<b>0.0198</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>CGS1</i>	<b>0.7046</b>	<b>0.0229</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>DHDPS1</i>	0.3482	0.3242
<i>AK-HSDHs+TSI+TD1</i>	<i>DHDPS2</i>	<b>0.8212</b>	<b>0.0036</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>DHDPSs</i>	<b>0.7698</b>	<b>0.0092</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>LKR-SDH1</i>	-0.3721	0.2897
<i>AK-HSDHs+TSI+TD1</i>	<i>SAMS1</i>	0.3933	0.2608
<i>AK-HSDHs+TSI+TD1</i>	<i>SAMS2</i>	<b>0.6321</b>	<b>0.0499</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>SAMS3</i>	<b>0.5690</b>	<b>0.0860</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>SAMS4</i>	<b>0.8280</b>	<b>0.0031</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>SAMSs</i>	<b>0.7127</b>	<b>0.0207</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>TD1</i>	<b>0.7503</b>	<b>0.0124</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>THA1</i>	<b>-0.4081</b>	<b>0.2418</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>THA2</i>	0.1431	0.6933
<i>AK-HSDHs+TSI+TD1</i>	<i>THAs</i>	0.0920	0.8005
<i>AK-HSDHs+TSI+TD1</i>	<i>THAs+TD1</i>	<b>0.7502</b>	<b>0.0124</b>
<i>AK-HSDHs+TSI+TD1</i>	<i>TS1</i>	<b>0.9633</b>	<b>&lt;.0001</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>AK1</i>	-0.1606	0.6577
<i>AK-HSDHs+TSI+THAs</i>	<i>AK1+AK2</i>	-0.0617	0.8656
<i>AK-HSDHs+TSI+THAs</i>	<i>AK1+AK3</i>	-0.0274	0.9401
<i>AK-HSDHs+TSI+THAs</i>	<i>AK2</i>	-0.0264	0.9424
<i>AK-HSDHs+TSI+THAs</i>	<i>AK2+AK3</i>	0.0004	0.9991
<i>AK-HSDHs+TSI+THAs</i>	<i>AK3</i>	0.1470	0.6853
<i>AK-HSDHs+TSI+THAs</i>	<i>AK-HSDH1</i>	<b>0.6583</b>	<b>0.0385</b>

<i>AK-HSDHs+TSI+THAs</i>	<i>AK-HSDH2</i>	<b>0.6227</b>	<b>0.0545</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>AK-HSDHs</i>	<b>0.7777</b>	<b>0.0081</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>AK-HSDHs+CGS1</i>	<b>0.8192</b>	<b>0.0037</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>AK-HSDHs+TSI</i>	<b>0.9998</b>	<b>&lt;.0001</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>AKs</i>	-0.0343	0.9251
<i>AK-HSDHs+TSI+THAs</i>	<i>AKs+AK-HSDHs</i>	0.1691	0.6405
<i>AK-HSDHs+TSI+THAs</i>	<i>AKs+AK-HSDHs+CGS1</i>	0.3216	0.3649
<i>AK-HSDHs+TSI+THAs</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	0.1961	0.5872
<i>AK-HSDHs+TSI+THAs</i>	<i>AKs+AK-HSDHs+TSI</i>	<b>0.5881</b>	<b>0.0737</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>AKs+AK-HSDHs+TSI+THAs</i>	<b>0.5848</b>	<b>0.0758</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>AKs+DHDPSs</i>	-0.0046	0.9899
<i>AK-HSDHs+TSI+THAs</i>	<i>BCAT1</i>	-0.2246	0.5327
<i>AK-HSDHs+TSI+THAs</i>	<b>Biosynthetic genes analyzed</b>	<b>0.6730</b>	<b>0.0329</b>
<i>AK-HSDHs+TSI+THAs</i>	<b>Catabolic genes analyzed</b>	<b>0.6918</b>	<b>0.0267</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>CGS1</i>	<b>0.7063</b>	<b>0.0224</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>DHDPS1</i>	0.3156	0.3744
<i>AK-HSDHs+TSI+THAs</i>	<i>DHDPS2</i>	<b>0.7943</b>	<b>0.0061</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>DHDPSs</i>	<b>0.7301</b>	<b>0.0165</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>LKR-SDH1</i>	-0.3833	0.2743
<i>AK-HSDHs+TSI+THAs</i>	<i>SAMS1</i>	0.3322	0.3483
<i>AK-HSDHs+TSI+THAs</i>	<i>SAMS2</i>	<b>0.5930</b>	<b>0.0708</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>SAMS3</i>	<b>0.5714</b>	<b>0.0844</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>SAMS4</i>	<b>0.8058</b>	<b>0.0049</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>SAMSs</i>	<b>0.6881</b>	<b>0.0278</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>TD1</i>	<b>0.7024</b>	<b>0.0235</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>THA1</i>	<b>-0.4048</b>	<b>0.2458</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>THA2</i>	0.1616	0.6556
<i>AK-HSDHs+TSI+THAs</i>	<i>THAs</i>	0.1084	0.7656
<i>AK-HSDHs+TSI+THAs</i>	<i>THAs+TD1</i>	<b>0.7077</b>	<b>0.0220</b>
<i>AK-HSDHs+TSI+THAs</i>	<i>TSI</i>	<b>0.9660</b>	<b>&lt;.0001</b>
<i>AKs</i>	<i>AK1</i>	-0.1242	0.7325
<i>AKs</i>	<i>AK2</i>	<b>0.9738</b>	<b>&lt;.0001</b>
<i>AKs</i>	<i>AK3</i>	0.1832	0.6124
<i>AKs</i>	<i>AK-HSDH1</i>	<b>-0.4840</b>	<b>0.1563</b>
<i>AKs</i>	<i>AK-HSDH2</i>	0.0039	0.9915
<i>AKs</i>	<i>AKs+AK-HSDHs</i>	<b>0.9672</b>	<b>&lt;.0001</b>
<i>AKs</i>	<i>BCAT1</i>	-0.1010	0.7812
<i>AKs</i>	<i>CGS1</i>	-0.0381	0.9167
<i>AKs</i>	<i>DHDPS1</i>	0.1132	0.7554
<i>AKs</i>	<i>DHDPS2</i>	-0.0068	0.9852
<i>AKs</i>	<i>LKR-SDH1</i>	0.3043	0.3926
<i>AKs</i>	<i>SAMS1</i>	-0.2489	0.4880
<i>AKs</i>	<i>SAMS2</i>	0.1387	0.7023
<i>AKs</i>	<i>SAMS3</i>	-0.2625	0.4637
<i>AKs</i>	<i>SAMS4</i>	-0.2591	0.4697
<i>AKs</i>	<i>TD1</i>	0.0100	0.9781
<i>AKs</i>	<i>THA1</i>	-0.0465	0.8986
<i>AKs</i>	<i>THA2</i>	<b>0.4576</b>	<b>0.1836</b>
<i>AKs</i>	<i>TSI</i>	0.0634	0.8618
<i>AKs/AK-HSDHs</i>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	<b>1.0000</b>	<b>&lt;.0001</b>
<i>AKs/AK-HSDHs</i>	<i>AK1</i>	-0.2304	0.5219
<i>AKs/AK-HSDHs</i>	<i>AK1+AK2</i>	<b>0.7242</b>	<b>0.0179</b>
<i>AKs/AK-HSDHs</i>	<i>AK1+AK3</i>	-0.0715	0.8443
<i>AKs/AK-HSDHs</i>	<i>AK2</i>	<b>0.7459</b>	<b>0.0132</b>
<i>AKs/AK-HSDHs</i>	<i>AK2+AK3</i>	<b>0.7548</b>	<b>0.0116</b>
<i>AKs/AK-HSDHs</i>	<i>AK3</i>	0.1720	0.6347
<i>AKs/AK-HSDHs</i>	<i>AK-HSDH1</i>	<b>-0.8182</b>	<b>0.0038</b>

<i>AKs/AK-HSDHs</i>	<i>AK-HSDH2</i>	<b>-0.5349</b>	<b>0.1111</b>
<i>AKs/AK-HSDHs</i>	<i>AK-HSDHs</i>	<b>-0.8097</b>	<b>0.0045</b>
<i>AKs/AK-HSDHs</i>	<i>AK-HSDHs+CGS1</i>	<b>-0.6860</b>	<b>0.0285</b>
<i>AKs/AK-HSDHs</i>	<i>AK-HSDHs+TS1</i>	<b>-0.5580</b>	<b>0.0937</b>
<i>AKs/AK-HSDHs</i>	<i>AK-HSDHs+TS1+TD1</i>	<b>-0.5412</b>	<b>0.1062</b>
<i>AKs/AK-HSDHs</i>	<i>AK-HSDHs+TS1+THAs</i>	<b>-0.5455</b>	<b>0.1029</b>
<i>AKs/AK-HSDHs</i>	<i>AKs</i>	<b>0.7432</b>	<b>0.0138</b>
<i>AKs/AK-HSDHs</i>	<i>AKs+AK-HSDHs</i>	<b>0.5584</b>	<b>0.0934</b>
<i>AKs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+CGS1</i>	<b>0.4326</b>	<b>0.2118</b>
<i>AKs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	<b>0.5420</b>	<b>0.1055</b>
<i>AKs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+TS1</i>	0.2621	0.4645
<i>AKs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.2391	0.5058
<i>AKs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.2690	0.4524
<i>AKs/AK-HSDHs</i>	<i>AKs+DHDPSs</i>	<b>0.7283</b>	<b>0.0169</b>
<i>AKs/AK-HSDHs</i>	<i>BCAT1</i>	-0.0689	0.8501
<i>AKs/AK-HSDHs</i>	Biosynthetic genes analyzed	0.1569	0.6651
<i>AKs/AK-HSDHs</i>	<b>Catabolic genes analyzed</b>	<b>-0.7172</b>	<b>0.0196</b>
<i>AKs/AK-HSDHs</i>	<i>CGS1</i>	<b>-0.4155</b>	<b>0.2324</b>
<i>AKs/AK-HSDHs</i>	<i>DHDPS1</i>	0.1196	0.7420
<i>AKs/AK-HSDHs</i>	<i>DHDPS2</i>	<b>-0.5194</b>	<b>0.1239</b>
<i>AKs/AK-HSDHs</i>	<i>DHDPSs</i>	-0.2850	0.4248
<i>AKs/AK-HSDHs</i>	<i>LKR-SDH1</i>	<b>0.6965</b>	<b>0.0252</b>
<i>AKs/AK-HSDHs</i>	<i>SAMS1</i>	-0.2118	0.5569
<i>AKs/AK-HSDHs</i>	<i>SAMS2</i>	0.0328	0.9283
<i>AKs/AK-HSDHs</i>	<i>SAMS3</i>	<b>-0.7288</b>	<b>0.0168</b>
<i>AKs/AK-HSDHs</i>	<i>SAMS4</i>	<b>-0.6735</b>	<b>0.0328</b>
<i>AKs/AK-HSDHs</i>	<i>SAMSs</i>	<b>-0.7192</b>	<b>0.0191</b>
<i>AKs/AK-HSDHs</i>	<i>TD1</i>	-0.2550	0.4771
<i>AKs/AK-HSDHs</i>	<i>THA1</i>	0.3046	0.3921
<i>AKs/AK-HSDHs</i>	<i>THA2</i>	<b>0.5020</b>	<b>0.1393</b>
<i>AKs/AK-HSDHs</i>	<i>THAs</i>	<b>0.6049</b>	<b>0.0639</b>
<i>AKs/AK-HSDHs</i>	<i>THAs+TD1</i>	-0.1394	0.7010
<i>AKs/AK-HSDHs</i>	<i>TS1</i>	-0.3727	0.2888
<i>AKs+AK-HSDHs</i>	<i>AK1</i>	-0.0976	0.7886
<i>AKs+AK-HSDHs</i>	<i>AK2</i>	<b>0.9284</b>	<b>0.0001</b>
<i>AKs+AK-HSDHs</i>	<i>AK3</i>	0.2277	0.5268
<i>AKs+AK-HSDHs</i>	<i>AK-HSDH1</i>	-0.2938	0.4101
<i>AKs+AK-HSDHs</i>	<i>AK-HSDH2</i>	0.2284	0.5257
<i>AKs+AK-HSDHs</i>	<i>BCAT1</i>	-0.1306	0.7190
<i>AKs+AK-HSDHs</i>	<i>CGS1</i>	0.1294	0.7217
<i>AKs+AK-HSDHs</i>	<i>DHDPS1</i>	0.0976	0.7885
<i>AKs+AK-HSDHs</i>	<i>DHDPS2</i>	0.1918	0.5956
<i>AKs+AK-HSDHs</i>	<i>LKR-SDH1</i>	0.1141	0.7536
<i>AKs+AK-HSDHs</i>	<i>SAMS1</i>	-0.1910	0.5972
<i>AKs+AK-HSDHs</i>	<i>SAMS2</i>	0.1878	0.6034
<i>AKs+AK-HSDHs</i>	<i>SAMS3</i>	-0.0507	0.8893
<i>AKs+AK-HSDHs</i>	<i>SAMS4</i>	-0.0435	0.9050
<i>AKs+AK-HSDHs</i>	<i>TD1</i>	0.1387	0.7024
<i>AKs+AK-HSDHs</i>	<i>THA1</i>	-0.1951	0.5891
<i>AKs+AK-HSDHs</i>	<i>THA2</i>	0.3991	0.2532
<i>AKs+AK-HSDHs</i>	<i>TS1</i>	0.2207	0.5401
<i>AKs+AK-HSDHs</i>	<i>AK1</i>	-0.1814	0.6159
<i>AKs+AK-HSDHs+CGS1</i>	<i>AK1+AK2</i>	<b>0.8819</b>	<b>0.0007</b>
<i>AKs+AK-HSDHs+CGS1</i>	<i>AK1+AK3</i>	0.0072	0.9842
<i>AKs+AK-HSDHs+CGS1</i>	<i>AK2</i>	<b>0.8883</b>	<b>0.0006</b>
<i>AKs+AK-HSDHs+CGS1</i>	<i>AK2+AK3</i>	<b>0.9012</b>	<b>0.0004</b>
<i>AKs+AK-HSDHs+CGS1</i>	<i>AK3</i>	0.2098	0.5608

<i>AKs+AK-HSDHs+CGS1</i>	<i>AK-HSDH1</i>	-0.1847	0.6095
<i>AKs+AK-HSDHs+CGS1</i>	<i>AK-HSDH2</i>	0.3585	0.3090
<i>AKs+AK-HSDHs+CGS1</i>	<i>AK-HSDHs</i>	0.1306	0.7191
<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b><i>AKs</i></b>	<b>0.9049</b>	<b>0.0003</b>
<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.9740</b>	<b>&lt;.0001</b>
<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>0.9766</b>	<b>&lt;.0001</b>
<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b><i>AKs+DHDPSs</i></b>	<b>0.9133</b>	<b>0.0002</b>
<i>AKs+AK-HSDHs+CGS1</i>	<i>BCAT1</i>	-0.1876	0.6038
<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b>Biosynthetic genes analyzed</b>	<b>0.9085</b>	<b>0.0003</b>
<i>AKs+AK-HSDHs+CGS1</i>	Catabolic genes analyzed	0.0498	0.8913
<i>AKs+AK-HSDHs+CGS1</i>	<i>CGS1</i>	0.3506	0.3206
<i>AKs+AK-HSDHs+CGS1</i>	<i>DHDPS1</i>	0.0652	0.8580
<i>AKs+AK-HSDHs+CGS1</i>	<i>DHDPS2</i>	0.3445	0.3297
<i>AKs+AK-HSDHs+CGS1</i>	<i>DHDPSs</i>	0.2776	0.4374
<i>AKs+AK-HSDHs+CGS1</i>	<i>LKR-SDH1</i>	-0.0443	0.9032
<i>AKs+AK-HSDHs+CGS1</i>	<i>SAMS1</i>	-0.0942	0.7958
<i>AKs+AK-HSDHs+CGS1</i>	<i>SAMS2</i>	0.2415	0.5015
<i>AKs+AK-HSDHs+CGS1</i>	<i>SAMS3</i>	0.0709	0.8458
<i>AKs+AK-HSDHs+CGS1</i>	<i>SAMS4</i>	0.1259	0.7289
<i>AKs+AK-HSDHs+CGS1</i>	<i>SAMSs</i>	0.0472	0.8971
<i>AKs+AK-HSDHs+CGS1</i>	<i>TD1</i>	0.2546	0.4778
<i>AKs+AK-HSDHs+CGS1</i>	<i>THA1</i>	-0.3490	0.3229
<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b><i>THA2</i></b>	<b>0.4704</b>	<b>0.1700</b>
<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b><i>THAs</i></b>	<b>0.4998</b>	<b>0.1413</b>
<i>AKs+AK-HSDHs+CGS1</i>	<i>THAs+TD1</i>	0.3327	0.3475
<i>AKs+AK-HSDHs+CGS1</i>	<i>TS1</i>	0.3545	0.3148
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>AK1</i>	-0.0940	0.7963
<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b><i>AK1+AK2</i></b>	<b>0.9355</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>AK1+AK3</i>	0.1049	0.7730
<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b><i>AK2</i></b>	<b>0.9216</b>	<b>0.0002</b>
<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b><i>AK2+AK3</i></b>	<b>0.9377</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>AK3</i>	0.2308	0.5212
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>AK-HSDH1</i>	-0.2844	0.4258
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>AK-HSDH2</i>	0.2496	0.4868
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>AK-HSDHs</i>	0.0031	0.9932
<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b><i>AKs</i></b>	<b>0.9616</b>	<b>&lt;.0001</b>
<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.9993</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>BCAT1</i>	-0.1565	0.6659
<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>Biosynthetic genes analyzed</b>	<b>0.8442</b>	<b>0.0021</b>
<i>AKs+AK-HSDHs+DHDPSs</i>	Catabolic genes analyzed	-0.0786	0.8292
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>CGS1</i>	0.1437	0.6920
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>DHDPS1</i>	0.1246	0.7315
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>DHDPS2</i>	0.2217	0.5382
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>DHDPSs</i>	0.2334	0.5164
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>LKR-SDH1</i>	0.1113	0.7595
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>SAMS1</i>	-0.1636	0.6516
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>SAMS2</i>	0.2187	0.5438
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>SAMS3</i>	-0.0369	0.9195
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>SAMS4</i>	-0.0175	0.9618
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>SAMSs</i>	-0.0812	0.8236
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>TD1</i>	0.1730	0.6327
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>THA1</i>	-0.2022	0.5754
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>THA2</i>	0.3946	0.2592
<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b><i>THAs</i></b>	<b>0.4523</b>	<b>0.1893</b>
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>THAs+TD1</i>	0.2432	0.4983
<i>AKs+AK-HSDHs+DHDPSs</i>	<i>TS1</i>	0.2477	0.4901
<i>AKs+AK-HSDHs+TS1</i>	<i>AK1</i>	-0.1941	0.5911

<i>AKs+AK-HSDHs+TSI</i>	<i>AK1+AK2</i>	<b>0.7574</b>	<b>0.0112</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>AK1+AK3</i>	0.0206	0.9549
<i>AKs+AK-HSDHs+TSI</i>	<i>AK2</i>	<b>0.7704</b>	<b>0.0091</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>AK2+AK3</i>	<b>0.7921</b>	<b>0.0063</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>AK3</i>	0.2403	0.5037
<i>AKs+AK-HSDHs+TSI</i>	<i>AK-HSDH1</i>	0.0153	0.9666
<i>AKs+AK-HSDHs+TSI</i>	<i>AK-HSDH2</i>	0.3920	0.2626
<i>AKs+AK-HSDHs+TSI</i>	<i>AK-HSDHs</i>	0.2652	0.4590
<i>AKs+AK-HSDHs+TSI</i>	<i>AK-HSDHs+CGS1</i>	0.3606	0.3061
<i>AKs+AK-HSDHs+TSI</i>	<i>AKs</i>	<b>0.7881</b>	<b>0.0068</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>AKs+AK-HSDHs</i>	<b>0.8879</b>	<b>0.0006</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>AKs+AK-HSDHs+CGS1</i>	<b>0.9307</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	<b>0.9001</b>	<b>0.0004</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>AKs+DHDPSs</i>	<b>0.8058</b>	<b>0.0049</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>BCAT1</i>	-0.2202	0.5410
<i>AKs+AK-HSDHs+TSI</i>	<b>Biosynthetic genes analyzed</b>	<b>0.9864</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+TSI</i>	Catabolic genes analyzed	0.1732	0.6322
<i>AKs+AK-HSDHs+TSI</i>	<i>CGS1</i>	<b>0.4012</b>	<b>0.2505</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>DHDPS1</i>	0.2851	0.4246
<i>AKs+AK-HSDHs+TSI</i>	<i>DHDPS2</i>	<b>0.4868</b>	<b>0.1536</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>DHDPSs</i>	<b>0.5062</b>	<b>0.1355</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>LKR-SDH1</i>	0.0074	0.9837
<i>AKs+AK-HSDHs+TSI</i>	<i>SAMS1</i>	0.0034	0.9925
<i>AKs+AK-HSDHs+TSI</i>	<i>SAMS2</i>	<b>0.4755</b>	<b>0.1648</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>SAMS3</i>	0.1435	0.6925
<i>AKs+AK-HSDHs+TSI</i>	<i>SAMS4</i>	0.2887	0.4184
<i>AKs+AK-HSDHs+TSI</i>	<i>SAMSs</i>	0.1689	0.6409
<i>AKs+AK-HSDHs+TSI</i>	<i>TD1</i>	<b>0.4414</b>	<b>0.2016</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>THA1</i>	-0.2865	0.4222
<i>AKs+AK-HSDHs+TSI</i>	<i>THA2</i>	<b>0.4607</b>	<b>0.1803</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>THAs</i>	<b>0.4942</b>	<b>0.1466</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>THAs+TD1</i>	<b>0.5170</b>	<b>0.1260</b>
<i>AKs+AK-HSDHs+TSI</i>	<i>TS1</i>	<b>0.6446</b>	<b>0.0442</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK1</i>	-0.2012	0.5773
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK1+AK2</i>	<b>0.7323</b>	<b>0.0160</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK1+AK3</i>	0.0262	0.9427
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK2</i>	<b>0.7477</b>	<b>0.0129</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK2+AK3</i>	<b>0.7726</b>	<b>0.0088</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK3</i>	0.2557	0.4759
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK-HSDH1</i>	0.0231	0.9496
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK-HSDH2</i>	<b>0.4191</b>	<b>0.2279</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK-HSDHs</i>	0.2873	0.4210
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK-HSDHs+CGS1</i>	0.3846	0.2724
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK-HSDHs+TSI</i>	<b>0.6075</b>	<b>0.0625</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AK-HSDHs+TSI+THAs</i>	<b>0.6143</b>	<b>0.0588</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AKs</i>	<b>0.7661</b>	<b>0.0098</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs</i>	<b>0.8710</b>	<b>0.0010</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs+CGS1</i>	<b>0.9196</b>	<b>0.0002</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	<b>0.8850</b>	<b>0.0007</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs+TSI</i>	<b>0.9984</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AKs+AK-HSDHs+TSI+THAs</i>	<b>0.9982</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>AKs+DHDPSs</i>	<b>0.7856</b>	<b>0.0071</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>BCAT1</i>	-0.2615	0.4655
<i>AKs+AK-HSDHs+TSI+TD1</i>	<b>Biosynthetic genes analyzed</b>	<b>0.9898</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	Catabolic genes analyzed	0.2111	0.5582
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>CGS1</i>	<b>0.4228</b>	<b>0.2235</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>DHDPS1</i>	0.3136	0.3776

<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>DHDPS2</i>	<b>0.5233</b>	<b>0.1206</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>DHDPSs</i>	<b>0.5489</b>	<b>0.1003</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>LKR-SDH1</i>	0.0011	0.9976
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>SAMS1</i>	0.0569	0.8760
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>SAMS2</i>	<b>0.5163</b>	<b>0.1266</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>SAMS3</i>	0.1588	0.6612
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>SAMS4</i>	0.3282	0.3546
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>SAMSs</i>	0.2067	0.5666
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>TD1</i>	<b>0.4911</b>	<b>0.1495</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>THA1</i>	-0.2985	0.4021
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>THA2</i>	<b>0.4526</b>	<b>0.1890</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>THAs</i>	<b>0.4841</b>	<b>0.1562</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>THAs+TD1</i>	<b>0.5632</b>	<b>0.0900</b>
<i>AKs+AK-HSDHs+TSI+TD1</i>	<i>TSI</i>	<b>0.6694</b>	<b>0.0343</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK1</i>	-0.1994	0.5808
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK1+AK2</i>	<b>0.7605</b>	<b>0.0107</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK1+AK3</i>	0.0140	0.9694
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK2</i>	<b>0.7745</b>	<b>0.0085</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK2+AK3</i>	<b>0.7956</b>	<b>0.0059</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK3</i>	0.2380	0.5079
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK-HSDH1</i>	0.0110	0.9760
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK-HSDH2</i>	0.3843	0.2729
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK-HSDHs</i>	0.2578	0.4721
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK-HSDHs+CGS1</i>	0.3569	0.3113
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AK-HSDHs+TSI</i>	<b>0.5774</b>	<b>0.0805</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AKs</i>	<b>0.7907</b>	<b>0.0065</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AKs+AK-HSDHs</i>	<b>0.8887</b>	<b>0.0006</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AKs+AK-HSDHs+CGS1</i>	<b>0.9317</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	<b>0.9007</b>	<b>0.0004</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AKs+AK-HSDHs+TSI</i>	<b>0.9999</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>AKs+DHDPSs</i>	<b>0.8082</b>	<b>0.0047</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>BCAT1</i>	-0.2188	0.5437
<i>AKs+AK-HSDHs+TSI+THAs</i>	<b>Biosynthetic genes analyzed</b>	<b>0.9863</b>	<b>&lt;.0001</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	Catabolic genes analyzed	0.1675	0.6436
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>CGS1</i>	<b>0.4023</b>	<b>0.2491</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>DHDPS1</i>	0.2846	0.4255
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>DHDPS2</i>	<b>0.4811</b>	<b>0.1593</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>DHDPSs</i>	<b>0.5016</b>	<b>0.1396</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>LKR-SDH1</i>	0.0115	0.9749
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>SAMS1</i>	0.0010	0.9977
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>SAMS2</i>	<b>0.4753</b>	<b>0.1650</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>SAMS3</i>	0.1380	0.7039
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>SAMS4</i>	0.2838	0.4269
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>SAMSs</i>	0.1632	0.6524
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>TD1</i>	<b>0.4382</b>	<b>0.2052</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>THA1</i>	-0.2866	0.4220
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>THA2</i>	<b>0.4709</b>	<b>0.1695</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>THAs</i>	<b>0.5043</b>	<b>0.1372</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>THAs+TD1</i>	<b>0.5160</b>	<b>0.1268</b>
<i>AKs+AK-HSDHs+TSI+THAs</i>	<i>TSI</i>	<b>0.6432</b>	<b>0.0448</b>
<i>AKs+DHDPSs</i>	<i>AK1</i>	-0.1213	0.7384
<i>AKs+DHDPSs</i>	<i>AK1+AK2</i>	<b>0.9817</b>	<b>&lt;.0001</b>
<i>AKs+DHDPSs</i>	<i>AK1+AK3</i>	0.0451	0.9016
<i>AKs+DHDPSs</i>	<i>AK2</i>	<b>0.9717</b>	<b>&lt;.0001</b>
<i>AKs+DHDPSs</i>	<i>AK2+AK3</i>	<b>0.9785</b>	<b>&lt;.0001</b>
<i>AKs+DHDPSs</i>	<i>AK3</i>	0.1876	0.6038
<i>AKs+DHDPSs</i>	<i>AK-HSDH1</i>	<b>-0.4751</b>	<b>0.1652</b>



<i>AKs+DHDPSs</i>	<i>AK-HSDH2</i>	0.0284	0.9379
<i>AKs+DHDPSs</i>	<i>AK-HSDHs</i>	-0.2484	0.4890
<b><i>AKs+DHDPSs</i></b>	<b><i>AKs</i></b>	<b>0.9992</b>	<b>&lt;.0001</b>
<i>AKs+DHDPSs</i>	<i>AKs+AK-HSDHs</i>	<b>0.9720</b>	<b>&lt;.0001</b>
<i>AKs+DHDPSs</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	<b>0.9679</b>	<b>&lt;.0001</b>
<i>AKs+DHDPSs</i>	<i>BCAT1</i>	-0.1289	0.7227
<b><i>AKs+DHDPSs</i></b>	<b>Biosynthetic genes analyzed</b>	<b>0.7272</b>	<b>0.0172</b>
<i>AKs+DHDPSs</i>	Catabolic genes analyzed	-0.2899	0.4165
<i>AKs+DHDPSs</i>	<i>CGS1</i>	-0.0210	0.9541
<i>AKs+DHDPSs</i>	<i>DHDPS1</i>	0.1411	0.6975
<i>AKs+DHDPSs</i>	<i>DHDPS2</i>	0.0262	0.9426
<i>AKs+DHDPSs</i>	<i>DHDPSs</i>	0.1073	0.7679
<i>AKs+DHDPSs</i>	<i>LKR-SDH1</i>	0.3005	0.3989
<i>AKs+DHDPSs</i>	<i>SAMS1</i>	-0.2211	0.5392
<i>AKs+DHDPSs</i>	<i>SAMS2</i>	0.1716	0.6354
<i>AKs+DHDPSs</i>	<i>SAMS3</i>	-0.2473	0.4909
<i>AKs+DHDPSs</i>	<i>SAMS4</i>	-0.2312	0.5204
<i>AKs+DHDPSs</i>	<i>SAMSs</i>	-0.2926	0.4120
<i>AKs+DHDPSs</i>	<i>TD1</i>	0.0468	0.8978
<i>AKs+DHDPSs</i>	<i>THA1</i>	-0.0561	0.8777
<b><i>AKs+DHDPSs</i></b>	<b><i>THA2</i></b>	<b>0.4551</b>	<b>0.1863</b>
<b><i>AKs+DHDPSs</i></b>	<b><i>THAs</i></b>	<b>0.5366</b>	<b>0.1098</b>
<i>AKs+DHDPSs</i>	<i>THAs+TD1</i>	0.1368	0.7062
<i>AKs+DHDPSs</i>	<i>TS1</i>	0.0931	0.7980
<i>BCAT1</i>	<i>AK1</i>	0.0978	0.7881
<i>BCAT1</i>	<i>AK2</i>	-0.0757	0.8353
<i>BCAT1</i>	<i>AK3</i>	-0.2499	0.4862
<i>BCAT1</i>	<i>AK-HSDH1</i>	0.3455	0.3281
<b><i>BCAT1</i></b>	<b><i>AK-HSDH2</i></b>	<b>-0.4400</b>	<b>0.2032</b>
<i>BCAT1</i>	<i>CGS1</i>	-0.2863	0.4226
<b><i>BCAT1</i></b>	<b><i>DHDPS1</i></b>	<b>-0.6254</b>	<b>0.0531</b>
<b><i>BCAT1</i></b>	<b><i>DHDPS2</i></b>	<b>-0.4806</b>	<b>0.1597</b>
<i>BCAT1</i>	<i>LKR-SDH1</i>	-0.1498	0.6795
<b><i>BCAT1</i></b>	<b><i>SAMS1</i></b>	<b>-0.8325</b>	<b>0.0028</b>
<b><i>BCAT1</i></b>	<b><i>SAMS2</i></b>	<b>-0.7326</b>	<b>0.0160</b>
<i>BCAT1</i>	<i>SAMS3</i>	0.1221	0.7369
<i>BCAT1</i>	<i>SAMS4</i>	-0.2971	0.4044
<b><i>BCAT1</i></b>	<b><i>TD1</i></b>	<b>-0.7622</b>	<b>0.0104</b>
<i>BCAT1</i>	<i>THA1</i>	0.1192	0.7428
<i>BCAT1</i>	<i>THA2</i>	-0.1096	0.7631
<i>BCAT1</i>	<i>TS1</i>	-0.2504	0.4853
<i>BCAT1</i>	<i>AK1</i>	-0.2397	0.5047
<b>Biosynthetic genes analyzed</b>	<b><i>AK2</i></b>	<b>0.7050</b>	<b>0.0228</b>
<i>Biosynthetic genes analyzed</i>	<i>AK3</i>	0.2170	0.5470
<i>Biosynthetic genes analyzed</i>	<i>AK-HSDH1</i>	0.0880	0.8090
<b><i>Biosynthetic genes analyzed</i></b>	<b><i>AK-HSDH2</i></b>	<b>0.4788</b>	<b>0.1615</b>
<i>Biosynthetic genes analyzed</i>	<i>AK-HSDHs</i>	0.3630	0.3025
<b><i>Biosynthetic genes analyzed</i></b>	<b><i>AKs</i></b>	<b>0.7071</b>	<b>0.0222</b>
<b><i>Biosynthetic genes analyzed</i></b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.8297</b>	<b>0.0030</b>
<i>Biosynthetic genes analyzed</i>	<i>BCAT1</i>	-0.2673	0.4552
<b><i>Biosynthetic genes analyzed</i></b>	<b><i>CGS1</i></b>	<b>0.5450</b>	<b>0.1033</b>
<i>Biosynthetic genes analyzed</i>	<i>DHDPS1</i>	0.2574	0.4727
<b><i>Biosynthetic genes analyzed</i></b>	<b><i>DHDPS2</i></b>	<b>0.5858</b>	<b>0.0752</b>
<b><i>Biosynthetic genes analyzed</i></b>	<b><i>DHDPSs</i></b>	<b>0.5550</b>	<b>0.0958</b>
<i>Biosynthetic genes analyzed</i>	<i>LKR-SDH1</i>	-0.1093	0.7638
<i>Biosynthetic genes analyzed</i>	<i>SAMS1</i>	0.0874	0.8103
<b><i>Biosynthetic genes analyzed</i></b>	<b><i>SAMS2</i></b>	<b>0.5013</b>	<b>0.1399</b>

Biosynthetic genes analyzed	<i>SAMS3</i>	0.2291	0.5243
<b>Biosynthetic genes analyzed</b>	<b><i>SAMS4</i></b>	<b>0.4054</b>	<b>0.2452</b>
Biosynthetic genes analyzed	<i>SAMSs</i>	0.2816	0.4306
<b>Biosynthetic genes analyzed</b>	<b><i>TD1</i></b>	<b>0.5178</b>	<b>0.1253</b>
Biosynthetic genes analyzed	<i>THA1</i>	-0.3894	0.2660
<b>Biosynthetic genes analyzed</b>	<b><i>THA2</i></b>	<b>0.4845</b>	<b>0.1558</b>
<b>Biosynthetic genes analyzed</b>	<b><i>THAs</i></b>	<b>0.4961</b>	<b>0.1447</b>
<b>Biosynthetic genes analyzed</b>	<b><i>TS1</i></b>	<b>0.7124</b>	<b>0.0208</b>
Catabolic genes analyzed	<i>AK1</i>	0.1243	0.7323
Catabolic genes analyzed	<i>AK2</i>	-0.3511	0.3199
Catabolic genes analyzed	<i>AK3</i>	0.0881	0.8087
<b>Catabolic genes analyzed</b>	<b><i>AK-HSDH1</i></b>	<b>0.6038</b>	<b>0.0645</b>
<b>Catabolic genes analyzed</b>	<b><i>AK-HSDH2</i></b>	<b>0.7832</b>	<b>0.0074</b>
<b>Catabolic genes analyzed</b>	<b><i>AK-HSDHs</i></b>	<b>0.8495</b>	<b>0.0019</b>
Catabolic genes analyzed	<i>AKs</i>	-0.3165	0.3729
Catabolic genes analyzed	<i>AKs+AK-HSDHs</i>	-0.1037	0.7756
Catabolic genes analyzed	<i>BCAT1</i>	-0.2748	0.4423
Catabolic genes analyzed	Biosynthetic genes analyzed	0.2857	0.4235
<b>Catabolic genes analyzed</b>	<b><i>CGS1</i></b>	<b>0.6532</b>	<b>0.0406</b>
Catabolic genes analyzed	<i>DHDPS1</i>	0.0468	0.8978
<b>Catabolic genes analyzed</b>	<b><i>DHDPS2</i></b>	<b>0.8364</b>	<b>0.0026</b>
<b>Catabolic genes analyzed</b>	<b><i>DHDPSs</i></b>	<b>0.6189</b>	<b>0.0564</b>
<b>Catabolic genes analyzed</b>	<b><i>LKR-SDH1</i></b>	<b>-0.7159</b>	<b>0.0199</b>
<b>Catabolic genes analyzed</b>	<b><i>SAMS1</i></b>	<b>0.5235</b>	<b>0.1204</b>
Catabolic genes analyzed	<i>SAMS2</i>	0.3217	0.3647
<b>Catabolic genes analyzed</b>	<b><i>SAMS3</i></b>	<b>0.8832</b>	<b>0.0007</b>
<b>Catabolic genes analyzed</b>	<b><i>SAMS4</i></b>	<b>0.9615</b>	<b>&lt;.0001</b>
<b>Catabolic genes analyzed</b>	<b><i>SAMSs</i></b>	<b>1.0000</b>	<b>&lt;.0001</b>
<b>Catabolic genes analyzed</b>	<b><i>TD1</i></b>	<b>0.6879</b>	<b>0.0279</b>
<b>Catabolic genes analyzed</b>	<b><i>THA1</i></b>	<b>-0.6937</b>	<b>0.0261</b>
Catabolic genes analyzed	<i>THA2</i>	-0.2401	0.5041
Catabolic genes analyzed	<i>THAs</i>	-0.3374	0.3404
<b>Catabolic genes analyzed</b>	<b><i>TS1</i></b>	<b>0.5402</b>	<b>0.1070</b>
<i>CGS1</i>	<i>AK1</i>	-0.3876	0.2684
<i>CGS1</i>	<i>AK2</i>	0.0487	0.8937
<i>CGS1</i>	<i>AK3</i>	-0.0205	0.9551
<b><i>CGS1</i></b>	<b><i>AK-HSDH1</i></b>	<b>0.4040</b>	<b>0.2469</b>
<b><i>CGS1</i></b>	<b><i>AK-HSDH2</i></b>	<b>0.6301</b>	<b>0.0509</b>
<i>CGS1</i>	<i>DHDPS1</i>	-0.1180	0.7455
<b><i>CGS1</i></b>	<b><i>DHDPS2</i></b>	<b>0.7182</b>	<b>0.0193</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.8290</b>	<b>0.0030</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>0.6566</b>	<b>0.0392</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.6851</b>	<b>0.0288</b>
<i>CGS1/SAMSs</i>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDH1</i>	-0.2670	0.4559
<i>CGS1/SAMSs</i>	<i>(AKs+DHDPSs)/LKR-SDH1</i>	-0.1032	0.7766
<b><i>CGS1/SAMSs</i></b>	<b><i>AK1</i></b>	<b>-0.5117</b>	<b>0.1306</b>
<i>CGS1/SAMSs</i>	<i>AK1+AK2</i>	0.3494	0.3223
<b><i>CGS1/SAMSs</i></b>	<b><i>AK1+AK3</i></b>	<b>-0.5267</b>	<b>0.1178</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>AK2</i></b>	<b>0.4430</b>	<b>0.1998</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>AK2+AK3</i></b>	<b>0.4172</b>	<b>0.2303</b>
<i>CGS1/SAMSs</i>	<i>AK3</i>	-0.0660	0.8563
<b><i>CGS1/SAMSs</i></b>	<b><i>AK-HSDH1</i></b>	<b>-0.5350</b>	<b>0.1110</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>AK-HSDH2</i></b>	<b>-0.5678</b>	<b>0.0869</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>AK-HSDHs</i></b>	<b>-0.6689</b>	<b>0.0345</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>-0.4420</b>	<b>0.2009</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>AK-HSDHs+TS1</i></b>	<b>-0.4609</b>	<b>0.1801</b>
<b><i>CGS1/SAMSs</i></b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>-0.4694</b>	<b>0.1711</b>

<i>CGS1/SAMSs</i>	<i>AK-HSDHs+TS1+THAs</i>	<b>-0.4456</b>	<b>0.1969</b>
<i>CGS1/SAMSs</i>	<i>AKs</i>	0.3306	0.3508
<i>CGS1/SAMSs</i>	<i>AKs/AK-HSDHs</i>	<b>0.6566</b>	<b>0.0392</b>
<i>CGS1/SAMSs</i>	<i>AKs+AK-HSDHs</i>	0.1662	0.6462
<i>CGS1/SAMSs</i>	<i>AKs+AK-HSDHs+CGS1</i>	0.1323	0.7157
<i>CGS1/SAMSs</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	0.1444	0.6906
<i>CGS1/SAMSs</i>	<i>AKs+AK-HSDHs+TS1</i>	-0.0137	0.9701
<i>CGS1/SAMSs</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.0412	0.9100
<i>CGS1/SAMSs</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.0050	0.9891
<i>CGS1/SAMSs</i>	<i>AKs+DHDPSs</i>	0.3086	0.3856
<i>CGS1/SAMSs</i>	<i>BCAT1</i>	0.0367	0.9198
<i>CGS1/SAMSs</i>	Biosynthetic genes analyzed	-0.0467	0.8981
<i>CGS1/SAMSs</i>	<b>Catabolic genes analyzed</b>	<b>-0.8081</b>	<b>0.0047</b>
<i>CGS1/SAMSs</i>	<i>CGS1</i>	-0.1149	0.7520
<i>CGS1/SAMSs</i>	<i>DHDPS1</i>	-0.1093	0.7636
<i>CGS1/SAMSs</i>	<i>DHDPS2</i>	<b>-0.5994</b>	<b>0.0670</b>
<i>CGS1/SAMSs</i>	<i>DHDPSs</i>	<b>-0.5094</b>	<b>0.1326</b>
<i>CGS1/SAMSs</i>	<i>DHDPSs/LKR-SDHI</i>	<b>-0.6879</b>	<b>0.0279</b>
<i>CGS1/SAMSs</i>	<i>LKR-SDHI</i>	<b>0.4779</b>	<b>0.1624</b>
<i>CGS1/SAMSs</i>	<i>SAMS1</i>	-0.2745	0.4427
<i>CGS1/SAMSs</i>	<i>SAMS2</i>	-0.1607	0.6575
<i>CGS1/SAMSs</i>	<i>SAMS3</i>	<b>-0.8089</b>	<b>0.0046</b>
<i>CGS1/SAMSs</i>	<i>SAMS4</i>	<b>-0.7041</b>	<b>0.0230</b>
<i>CGS1/SAMSs</i>	<i>SAMSs</i>	<b>-0.8086</b>	<b>0.0046</b>
<i>CGS1/SAMSs</i>	<i>TD1</i>	<b>-0.4405</b>	<b>0.2026</b>
<i>CGS1/SAMSs</i>	<i>THA1</i>	0.3883	0.2675
<i>CGS1/SAMSs</i>	<i>THA2</i>	<b>0.6274</b>	<b>0.0522</b>
<i>CGS1/SAMSs</i>	<i>THAs</i>	<b>0.6592</b>	<b>0.0381</b>
<i>CGS1/SAMSs</i>	<i>THAs+TD1</i>	-0.2968	0.4050
<i>CGS1/SAMSs</i>	<i>TS1</i>	-0.3062	0.3895
<i>CGS1/TS1</i>	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.3041	0.3930
<i>CGS1/TS1</i>	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.1634	0.6520
<i>CGS1/TS1</i>	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0370	0.9192
<i>CGS1/TS1</i>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.2703	0.4500
<i>CGS1/TS1</i>	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.1636	0.6515
<i>CGS1/TS1</i>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.1265	0.7277
<i>CGS1/TS1</i>	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0653	0.8577
<i>CGS1/TS1</i>	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0220	0.9519
<i>CGS1/TS1</i>	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.2059	0.5682
<i>CGS1/TS1</i>	<i>AK1</i>	-0.1793	0.6201
<i>CGS1/TS1</i>	<i>AK1+AK2</i>	0.0722	0.8429
<i>CGS1/TS1</i>	<i>AK1+AK3</i>	-0.1980	0.5835
<i>CGS1/TS1</i>	<i>AK2</i>	0.1086	0.7653
<i>CGS1/TS1</i>	<i>AK2+AK3</i>	0.0974	0.7890
<i>CGS1/TS1</i>	<i>AK3</i>	-0.0352	0.9231
<i>CGS1/TS1</i>	<i>AK-HSDH1</i>	<b>-0.4396</b>	<b>0.2037</b>
<i>CGS1/TS1</i>	<i>AK-HSDH2</i>	0.0073	0.9840
<i>CGS1/TS1</i>	<i>AK-HSDHs</i>	-0.2432	0.4984
<i>CGS1/TS1</i>	<i>AK-HSDHs+CGS1</i>	-0.0842	0.8170
<i>CGS1/TS1</i>	<i>AK-HSDHs+TS1</i>	<b>-0.5998</b>	<b>0.0668</b>
<i>CGS1/TS1</i>	<i>AK-HSDHs+TS1+TD1</i>	<b>-0.5917</b>	<b>0.0715</b>
<i>CGS1/TS1</i>	<i>AK-HSDHs+TS1+THAs</i>	<b>-0.5999</b>	<b>0.0667</b>
<i>CGS1/TS1</i>	<i>AKs</i>	0.0641	0.8603
<i>CGS1/TS1</i>	<i>AKs/AK-HSDHs</i>	0.2703	0.4500
<i>CGS1/TS1</i>	<i>AKs+AK-HSDHs</i>	0.0033	0.9928
<i>CGS1/TS1</i>	<i>AKs+AK-HSDHs+CGS1</i>	0.0247	0.9459
<i>CGS1/TS1</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0182	0.9603

<i>CGS1/TS1</i>	<i>AKs+AK-HSDHs+TS1</i>	-0.3182	0.3702
<i>CGS1/TS1</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.3295	0.3525
<i>CGS1/TS1</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.3149	0.3755
<i>CGS1/TS1</i>	<i>AKs+DHDPSs</i>	0.0427	0.9068
<i>CGS1/TS1</i>	<i>BCAT1</i>	-0.0380	0.9169
<i>CGS1/TS1</i>	Biosynthetic genes analyzed	-0.2862	0.4228
<i>CGS1/TS1</i>	Catabolic genes analyzed	-0.1579	0.6630
<i>CGS1/TS1</i>	<i>CGS1</i>	0.1002	0.7831
<i>CGS1/TS1</i>	<i>CGS1/SAMSs</i>	0.3805	0.2780
<b><i>CGS1/TS1</i></b>	<b><i>DHDPS1</i></b>	<b>-0.6308</b>	<b>0.0505</b>
<i>CGS1/TS1</i>	<i>DHDPS2</i>	-0.2408	0.5027
<b><i>CGS1/TS1</i></b>	<b><i>DHDPSs</i></b>	<b>-0.5476</b>	<b>0.1013</b>
<i>CGS1/TS1</i>	<i>DHDPSs/AK-HSDHs</i>	0.0721	0.8432
<i>CGS1/TS1</i>	<i>DHDPSs/LKR-SDH1</i>	-0.1404	0.6988
<i>CGS1/TS1</i>	<i>LKR-SDH1</i>	-0.2800	0.4334
<i>CGS1/TS1</i>	<i>SAMS1</i>	0.0047	0.9897
<b><i>CGS1/TS1</i></b>	<b><i>SAMS2</i></b>	<b>-0.5344</b>	<b>0.1116</b>
<i>CGS1/TS1</i>	<i>SAMS3</i>	-0.1396	0.7006
<i>CGS1/TS1</i>	<i>SAMS4</i>	-0.2278	0.5267
<i>CGS1/TS1</i>	<i>SAMSs</i>	-0.1534	0.6722
<i>CGS1/TS1</i>	<i>TD1</i>	-0.3286	0.3539
<i>CGS1/TS1</i>	<i>TD1/BCAT1</i>	-0.0397	0.9133
<i>CGS1/TS1</i>	<i>THA1</i>	-0.2625	0.4637
<i>CGS1/TS1</i>	<i>THA2</i>	0.0633	0.8621
<i>CGS1/TS1</i>	<i>THAs</i>	0.0126	0.9724
<i>CGS1/TS1</i>	<i>THAs+TD1</i>	-0.3253	0.3590
<b><i>CGS1/TS1</i></b>	<b><i>TS1</i></b>	<b>-0.6805</b>	<b>0.0303</b>
<i>CGS1/TS1</i>	<i>TS1/(THAs+TD1)</i>	-0.2094	0.5616
<i>CGS1/TS1</i>	<i>TS1/TD1</i>	0.0145	0.9683
<b><i>CGS1/TS1</i></b>	<b><i>TS1/THAs</i></b>	<b>-0.4269</b>	<b>0.2185</b>
<i>DHDPS1</i>	<i>AK1</i>	0.1099	0.7625
<i>DHDPS1</i>	<i>AK2</i>	0.0759	0.8349
<i>DHDPS1</i>	<i>AK3</i>	0.0628	0.8631
<i>DHDPS1</i>	<i>AK-HSDH1</i>	-0.1056	0.7716
<i>DHDPS1</i>	<i>AK-HSDH2</i>	-0.0317	0.9308
<i>DHDPS2</i>	<i>AK1</i>	-0.0351	0.9233
<i>DHDPS2</i>	<i>AK2</i>	-0.0212	0.9537
<i>DHDPS2</i>	<i>AK3</i>	0.1275	0.7257
<i>DHDPS2</i>	<i>AK-HSDH1</i>	0.3375	0.3403
<b><i>DHDPS2</i></b>	<b><i>AK-HSDH2</i></b>	<b>0.8639</b>	<b>0.0013</b>
<i>DHDPS2</i>	<i>DHDPS1</i>	0.1807	0.6174
<i>DHDPSs</i>	<i>AK1</i>	0.0678	0.8523
<i>DHDPSs</i>	<i>AK2</i>	0.0276	0.9396
<i>DHDPSs</i>	<i>AK3</i>	0.1368	0.7062
<i>DHDPSs</i>	<i>AK-HSDH1</i>	0.1662	0.6463
<b><i>DHDPSs</i></b>	<b><i>AK-HSDH2</i></b>	<b>0.5851</b>	<b>0.0756</b>
<b><i>DHDPSs</i></b>	<b><i>AK-HSDHs</i></b>	<b>0.4764</b>	<b>0.1640</b>
<i>DHDPSs</i>	<i>AKs</i>	0.0676	0.8529
<i>DHDPSs</i>	<i>AKs+AK-HSDHs</i>	0.1962	0.5869
<b><i>DHDPSs</i></b>	<b><i>BCAT1</i></b>	<b>-0.7088</b>	<b>0.0218</b>
<b><i>DHDPSs</i></b>	<b><i>CGS1</i></b>	<b>0.4066</b>	<b>0.2436</b>
<b><i>DHDPSs</i></b>	<b><i>DHDPS1</i></b>	<b>0.7302</b>	<b>0.0165</b>
<b><i>DHDPSs</i></b>	<b><i>DHDPS2</i></b>	<b>0.8025</b>	<b>0.0052</b>
<i>DHDPSs</i>	<i>LKR-SDH1</i>	-0.0368	0.9197
<b><i>DHDPSs</i></b>	<b><i>SAMS1</i></b>	<b>0.6726</b>	<b>0.0331</b>
<b><i>DHDPSs</i></b>	<b><i>SAMS2</i></b>	<b>0.8541</b>	<b>0.0017</b>
<i>DHDPSs</i>	<i>SAMS3</i>	0.3353	0.3435

<i>DHDPSs</i>	<i>SAMS4</i>	<b>0.6573</b>	<b>0.0389</b>
<i>DHDPSs</i>	<i>TD1</i>	<b>0.9197</b>	<b>0.0002</b>
<i>DHDPSs</i>	<i>THA1</i>	-0.2383	0.5074
<i>DHDPSs</i>	<i>THA2</i>	0.0000	1.0000
<i>DHDPSs</i>	<i>TS1</i>	<b>0.7481</b>	<b>0.0128</b>
<i>DHDPSs/AK-HSDHs</i>	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.1300	0.7203
<i>DHDPSs/AK-HSDHs</i>	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>-0.5210</b>	<b>0.1225</b>
<i>DHDPSs/AK-HSDHs</i>	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.2264	0.5294
<i>DHDPSs/AK-HSDHs</i>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	<b>0.8347</b>	<b>0.0027</b>
<i>DHDPSs/AK-HSDHs</i>	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<b>0.5940</b>	<b>0.0702</b>
<i>DHDPSs/AK-HSDHs</i>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<b>-0.7176</b>	<b>0.0195</b>
<i>DHDPSs/AK-HSDHs</i>	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.2093	0.5616
<i>DHDPSs/AK-HSDHs</i>	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.2009	0.5778
<i>DHDPSs/AK-HSDHs</i>	<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>-0.5282</b>	<b>0.1166</b>
<i>DHDPSs/AK-HSDHs</i>	<i>AK1</i>	-0.1145	0.7529
<i>DHDPSs/AK-HSDHs</i>	<i>AK1+AK2</i>	0.3312	0.3499
<i>DHDPSs/AK-HSDHs</i>	<i>AK1+AK3</i>	-0.0714	0.8447
<i>DHDPSs/AK-HSDHs</i>	<i>AK2</i>	0.3424	0.3328
<i>DHDPSs/AK-HSDHs</i>	<i>AK2+AK3</i>	0.3395	0.3372
<i>DHDPSs/AK-HSDHs</i>	<i>AK3</i>	0.0431	0.9060
<i>DHDPSs/AK-HSDHs</i>	<i>AK-HSDH1</i>	<b>-0.8179</b>	<b>0.0038</b>
<i>DHDPSs/AK-HSDHs</i>	<i>AK-HSDH2</i>	<b>-0.7431</b>	<b>0.0138</b>
<i>DHDPSs/AK-HSDHs</i>	<i>AK-HSDHs</i>	<b>-0.9446</b>	<b>&lt;.0001</b>
<i>DHDPSs/AK-HSDHs</i>	<i>AK-HSDHs+CGS1</i>	<b>-0.8611</b>	<b>0.0014</b>
<i>DHDPSs/AK-HSDHs</i>	<i>AK-HSDHs+TS1</i>	<b>-0.6291</b>	<b>0.0514</b>
<i>DHDPSs/AK-HSDHs</i>	<i>AK-HSDHs+TS1+TD1</i>	<b>-0.6065</b>	<b>0.0630</b>
<i>DHDPSs/AK-HSDHs</i>	<i>AK-HSDHs+TS1+THAs</i>	<b>-0.6176</b>	<b>0.0571</b>
<i>DHDPSs/AK-HSDHs</i>	<i>AKs</i>	0.3336	0.3462
<i>DHDPSs/AK-HSDHs</i>	<i>AKs/AK-HSDHs</i>	<b>0.8347</b>	<b>0.0027</b>
<i>DHDPSs/AK-HSDHs</i>	<i>AKs+AK-HSDHs</i>	0.0973	0.7892
<i>DHDPSs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+CGS1</i>	-0.0454	0.9009
<i>DHDPSs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	0.0864	0.8123
<i>DHDPSs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+TS1</i>	-0.1149	0.7519
<i>DHDPSs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.1271	0.7264
<i>DHDPSs/AK-HSDHs</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.1081	0.7663
<i>DHDPSs/AK-HSDHs</i>	<i>AKs+DHDPSs</i>	0.3214	0.3651
<i>DHDPSs/AK-HSDHs</i>	<i>BCAT1</i>	-0.1296	0.7212
<i>DHDPSs/AK-HSDHs</i>	Biosynthetic genes analyzed	-0.2144	0.5520
<i>DHDPSs/AK-HSDHs</i>	Catabolic genes analyzed	<b>-0.7906</b>	<b>0.0065</b>
<i>DHDPSs/AK-HSDHs</i>	<i>CGS1</i>	<b>-0.6031</b>	<b>0.0649</b>
<i>DHDPSs/AK-HSDHs</i>	<i>CGS1/SAMSs</i>	<b>0.6260</b>	<b>0.0529</b>
<i>DHDPSs/AK-HSDHs</i>	<i>DHDPS1</i>	0.3277	0.3553
<i>DHDPSs/AK-HSDHs</i>	<i>DHDPS2</i>	<b>-0.6272</b>	<b>0.0523</b>
<i>DHDPSs/AK-HSDHs</i>	<i>DHDPSs</i>	-0.2377	0.5084
<i>DHDPSs/AK-HSDHs</i>	<i>DHDPSs/LKR-SDHI</i>	<b>-0.9343</b>	<b>&lt;.0001</b>
<i>DHDPSs/AK-HSDHs</i>	<i>LKR-SDHI</i>	<b>0.8801</b>	<b>0.0008</b>
<i>DHDPSs/AK-HSDHs</i>	<i>SAMS1</i>	-0.0761	0.8346
<i>DHDPSs/AK-HSDHs</i>	<i>SAMS2</i>	0.1226	0.7358
<i>DHDPSs/AK-HSDHs</i>	<i>SAMS3</i>	<b>-0.8771</b>	<b>0.0009</b>
<i>DHDPSs/AK-HSDHs</i>	<i>SAMS4</i>	<b>-0.7611</b>	<b>0.0106</b>
<i>DHDPSs/AK-HSDHs</i>	<i>SAMSs</i>	<b>-0.7923</b>	<b>0.0063</b>
<i>DHDPSs/AK-HSDHs</i>	<i>TD1</i>	-0.2565	0.4744
<i>DHDPSs/AK-HSDHs</i>	<i>TD1/BCAT1</i>	-0.2439	0.4971
<i>DHDPSs/AK-HSDHs</i>	<i>THA1</i>	<b>0.5464</b>	<b>0.1022</b>
<i>DHDPSs/AK-HSDHs</i>	<i>THA2</i>	0.3462	0.3271
<i>DHDPSs/AK-HSDHs</i>	<i>THAs</i>	<b>0.4662</b>	<b>0.1744</b>
<i>DHDPSs/AK-HSDHs</i>	<i>THAs+TD1</i>	-0.1621	0.6546

<i>DHDPSs/AK-HSDHs</i>	<i>TS1</i>	<b>-0.4053</b>	<b>0.2452</b>
<i>DHDPSs/AK-HSDHs</i>	<i>TS1/(THAs+TD1)</i>	-0.3058	0.3902
<i>DHDPSs/AK-HSDHs</i>	<i>TS1/TD1</i>	-0.3373	0.3406
<i>DHDPSs/AK-HSDHs</i>	<i>TS1/THAs</i>	<b>-0.6545</b>	<b>0.0400</b>
<i>DHDPSs/LKR-SDHI</i>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	<b>-0.8080</b>	<b>0.0047</b>
<i>DHDPSs/LKR-SDHI</i>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<b>0.6526</b>	<b>0.0408</b>
<i>DHDPSs/LKR-SDHI</i>	<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>0.4687</b>	<b>0.1718</b>
<i>DHDPSs/LKR-SDHI</i>	<i>AK1</i>	0.0928	0.7988
<i>DHDPSs/LKR-SDHI</i>	<i>AK1+AK2</i>	-0.2923	0.4125
<i>DHDPSs/LKR-SDHI</i>	<i>AK1+AK3</i>	0.1023	0.7787
<i>DHDPSs/LKR-SDHI</i>	<i>AK2</i>	-0.3003	0.3992
<i>DHDPSs/LKR-SDHI</i>	<i>AK2+AK3</i>	-0.2878	0.4200
<i>DHDPSs/LKR-SDHI</i>	<i>AK3</i>	0.0212	0.9537
<i>DHDPSs/LKR-SDHI</i>	<i>AK-HSDHI</i>	<b>0.7027</b>	<b>0.0234</b>
<i>DHDPSs/LKR-SDHI</i>	<i>AK-HSDH2</i>	<b>0.8695</b>	<b>0.0011</b>
<i>DHDPSs/LKR-SDHI</i>	<i>AK-HSDHs</i>	<b>0.9626</b>	<b>&lt;.0001</b>
<i>DHDPSs/LKR-SDHI</i>	<i>AK-HSDHs+CGS1</i>	<b>0.9417</b>	<b>&lt;.0001</b>
<i>DHDPSs/LKR-SDHI</i>	<i>AK-HSDHs+TS1</i>	<b>0.7658</b>	<b>0.0098</b>
<i>DHDPSs/LKR-SDHI</i>	<i>AK-HSDHs+TS1+TD1</i>	<b>0.7617</b>	<b>0.0105</b>
<i>DHDPSs/LKR-SDHI</i>	<i>AK-HSDHs+TS1+THAs</i>	<b>0.7560</b>	<b>0.0114</b>
<i>DHDPSs/LKR-SDHI</i>	<i>AKs</i>	-0.2836	0.4271
<i>DHDPSs/LKR-SDHI</i>	<i>AKs/AK-HSDHs</i>	<b>-0.8080</b>	<b>0.0047</b>
<i>DHDPSs/LKR-SDHI</i>	<i>AKs+AK-HSDHs</i>	-0.0405	0.9115
<i>DHDPSs/LKR-SDHI</i>	<i>AKs+AK-HSDHs+CGS1</i>	0.1292	0.7220
<i>DHDPSs/LKR-SDHI</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0197	0.9570
<i>DHDPSs/LKR-SDHI</i>	<i>AKs+AK-HSDHs+TS1</i>	0.2399	0.5044
<i>DHDPSs/LKR-SDHI</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.2662	0.4572
<i>DHDPSs/LKR-SDHI</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.2332	0.5166
<i>DHDPSs/LKR-SDHI</i>	<i>AKs+DHDPSs</i>	-0.2608	0.4667
<i>DHDPSs/LKR-SDHI</i>	<i>BCAT1</i>	-0.1525	0.6740
<i>DHDPSs/LKR-SDHI</i>	Biosynthetic genes analyzed	0.3577	0.3102
<i>DHDPSs/LKR-SDHI</i>	Catabolic genes analyzed	<b>0.9189</b>	<b>0.0002</b>
<i>DHDPSs/LKR-SDHI</i>	<i>CGS1</i>	<b>0.7364</b>	<b>0.0152</b>
<i>DHDPSs/LKR-SDHI</i>	<i>DHDPS1</i>	-0.1216	0.7378
<i>DHDPSs/LKR-SDHI</i>	<i>DHDPS2</i>	<b>0.8475</b>	<b>0.0020</b>
<i>DHDPSs/LKR-SDHI</i>	<i>DHDPSs</i>	<b>0.5148</b>	<b>0.1279</b>
<i>DHDPSs/LKR-SDHI</i>	<i>LKR-SDHI</i>	<b>-0.8450</b>	<b>0.0021</b>
<i>DHDPSs/LKR-SDHI</i>	<i>SAMS1</i>	0.3418	0.3337
<i>DHDPSs/LKR-SDHI</i>	<i>SAMS2</i>	0.1550	0.6689
<i>DHDPSs/LKR-SDHI</i>	<i>SAMS3</i>	<b>0.8786</b>	<b>0.0008</b>
<i>DHDPSs/LKR-SDHI</i>	<i>SAMS4</i>	<b>0.9089</b>	<b>0.0003</b>
<i>DHDPSs/LKR-SDHI</i>	<i>SAMs</i>	<b>0.9198</b>	<b>0.0002</b>
<i>DHDPSs/LKR-SDHI</i>	<i>TD1</i>	<b>0.5414</b>	<b>0.1061</b>
<i>DHDPSs/LKR-SDHI</i>	<i>THA1</i>	<b>-0.6698</b>	<b>0.0341</b>
<i>DHDPSs/LKR-SDHI</i>	<i>THA2</i>	-0.2576	0.4724
<i>DHDPSs/LKR-SDHI</i>	<i>THAs</i>	-0.3620	0.3039
<i>DHDPSs/LKR-SDHI</i>	<i>THAs+TD1</i>	<b>0.4554</b>	<b>0.1860</b>
<i>DHDPSs/LKR-SDHI</i>	<i>TS1</i>	<b>0.5763</b>	<b>0.0812</b>
Free (Lys+Met+Thr+Ile)/Asp	<i>(AK-HSDHs+CGS1)/SAMs</i>	-0.1181	0.7451
Free (Lys+Met+Thr+Ile)/Asp	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.0206	0.9550
Free (Lys+Met+Thr+Ile)/Asp	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1931	0.5929
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	<b>0.4854</b>	<b>0.1550</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<i>(AKs+AK-HSDHs+CGS1)/SAMs</i>	<b>0.4020</b>	<b>0.2495</b>
Free (Lys+Met+Thr+Ile)/Asp	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.0896	0.8057
Free (Lys+Met+Thr+Ile)/Asp	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1967	0.5860
Free (Lys+Met+Thr+Ile)/Asp	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1808	0.6172
Free (Lys+Met+Thr+Ile)/Asp	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.0365	0.9203

<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>AK activity with four effectors</b>	<b>0.4270</b>	<b>0.2184</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>AK activity without effectors</b>	<b>0.5918</b>	<b>0.0715</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.5783</b>	<b>0.0799</b>
Free (Lys+Met+Thr+Ile)/Asp	AK activity/HSDH activity without effectors	0.3932	0.2610
Free (Lys+Met+Thr+Ile)/Asp	<i>AK1</i>	0.0361	0.9212
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b><i>AK1+AK2</i></b>	<b>0.5103</b>	<b>0.1318</b>
Free (Lys+Met+Thr+Ile)/Asp	<i>AK1+AK3</i>	-0.1433	0.6928
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b><i>AK2</i></b>	<b>0.4837</b>	<b>0.1566</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b><i>AK2+AK3</i></b>	<b>0.4298</b>	<b>0.2151</b>
Free (Lys+Met+Thr+Ile)/Asp	<i>AK3</i>	-0.2381	0.5077
Free (Lys+Met+Thr+Ile)/Asp	<i>AK-HSDH1</i>	-0.0611	0.8669
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b><i>AK-HSDH2</i></b>	<b>-0.5565</b>	<b>0.0948</b>
Free (Lys+Met+Thr+Ile)/Asp	<i>AK-HSDHs</i>	-0.3967	0.2564
Free (Lys+Met+Thr+Ile)/Asp	<i>AK-HSDHs+CGS1</i>	-0.3382	0.3392
Free (Lys+Met+Thr+Ile)/Asp	<i>AK-HSDHs+TS1</i>	-0.0462	0.8991
Free (Lys+Met+Thr+Ile)/Asp	<i>AK-HSDHs+TS1+TD1</i>	-0.0580	0.8736
Free (Lys+Met+Thr+Ile)/Asp	<i>AK-HSDHs+TS1+THAs</i>	-0.0346	0.9243
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b><i>AKs</i></b>	<b>0.4587</b>	<b>0.1824</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>0.4854</b>	<b>0.1550</b>
Free (Lys+Met+Thr+Ile)/Asp	<i>AKs+AK-HSDHs</i>	0.3721	0.2897
Free (Lys+Met+Thr+Ile)/Asp	<i>AKs+AK-HSDHs+CGS1</i>	0.3045	0.3923
Free (Lys+Met+Thr+Ile)/Asp	<i>AKs+AK-HSDHs+DHDPSs</i>	0.3653	0.2992
Free (Lys+Met+Thr+Ile)/Asp	<i>AKs+AK-HSDHs+TS1</i>	0.3458	0.3277
Free (Lys+Met+Thr+Ile)/Asp	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.3246	0.3601
Free (Lys+Met+Thr+Ile)/Asp	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.3523	0.3181
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b><i>AKs+DHDPSs</i></b>	<b>0.4528</b>	<b>0.1888</b>
Free (Lys+Met+Thr+Ile)/Asp	<i>BCAT1</i>	0.3764	0.2837
Free (Lys+Met+Thr+Ile)/Asp	Biosynthetic genes analyzed	0.2740	0.4437
Free (Lys+Met+Thr+Ile)/Asp	Catabolic genes analyzed	-0.2517	0.4830
Free (Lys+Met+Thr+Ile)/Asp	<i>CGS1</i>	-0.2076	0.5649
Free (Lys+Met+Thr+Ile)/Asp	<i>CGS1/SAMSs</i>	0.1181	0.7452
Free (Lys+Met+Thr+Ile)/Asp	<i>CGS1/TS1</i>	-0.3145	0.3761
Free (Lys+Met+Thr+Ile)/Asp	<i>DHDPS1</i>	0.2179	0.5454
Free (Lys+Met+Thr+Ile)/Asp	<i>DHDPS2</i>	-0.3178	0.3709
Free (Lys+Met+Thr+Ile)/Asp	<i>DHDPSs</i>	-0.0817	0.8226
Free (Lys+Met+Thr+Ile)/Asp	<i>DHDPSs/AK-HSDHs</i>	0.3744	0.2865
Free (Lys+Met+Thr+Ile)/Asp	<i>DHDPSs/LKR-SDH1</i>	-0.3965	0.2566
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Ala</b>	<b>-0.4464</b>	<b>0.1960</b>
Free (Lys+Met+Thr+Ile)/Asp	Free Arg	-0.3031	0.3945
Free (Lys+Met+Thr+Ile)/Asp	Free Asn	-0.3199	0.3675
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Asn+Asp</b>	<b>-0.4395</b>	<b>0.2038</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>0.6100</b>	<b>0.0611</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>0.6150</b>	<b>0.0585</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Asp</b>	<b>-0.4475</b>	<b>0.1947</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>0.6509</b>	<b>0.0415</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Cys</b>	<b>0.6880</b>	<b>0.0279</b>
Free (Lys+Met+Thr+Ile)/Asp	Free Gln	-0.3576	0.3104
Free (Lys+Met+Thr+Ile)/Asp	Free Glu	-0.2089	0.5625
Free (Lys+Met+Thr+Ile)/Asp	Free Gly	-0.3191	0.3688
Free (Lys+Met+Thr+Ile)/Asp	Free Gly+Ile	-0.2938	0.4100
Free (Lys+Met+Thr+Ile)/Asp	Free His	-0.2828	0.4286
Free (Lys+Met+Thr+Ile)/Asp	Free Ile	0.3486	0.3236
Free (Lys+Met+Thr+Ile)/Asp	Free Leu	-0.3788	0.2804
Free (Lys+Met+Thr+Ile)/Asp	Free Lys	-0.3077	0.3871
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>0.8804</b>	<b>0.0008</b>
Free (Lys+Met+Thr+Ile)/Asp	Free Met	-0.3399	0.3365
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Met+Thr+Ile</b>	<b>0.8905</b>	<b>0.0006</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Phe</b>	<b>-0.4830</b>	<b>0.1574</b>

<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Pro</b>	<b>-0.4419</b>	<b>0.2011</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Ser</b>	<b>-0.6346</b>	<b>0.0488</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Thr</b>	<b>0.8937</b>	<b>0.0005</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Trp</b>	<b>-0.4668</b>	<b>0.1738</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Tyr</b>	<b>-0.4007</b>	<b>0.2512</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Free Val</b>	<b>-0.4174</b>	<b>0.2301</b>
Free (Lys+Met+Thr+Ile)/Asp	HSDH activity with four effectors	-0.2975	0.4039
Free (Lys+Met+Thr+Ile)/Asp	HSDH activity without effectors	-0.0228	0.9502
Free (Lys+Met+Thr+Ile)/Asp	<i>LKR-SDHI</i>	0.3909	0.2640
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Lys-sensitive AK activity</b>	<b>0.7222</b>	<b>0.0183</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.5441</b>	<b>0.1040</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>SAMS1</b>	<b>-0.4721</b>	<b>0.1683</b>
Free (Lys+Met+Thr+Ile)/Asp	<i>SAMS2</i>	0.0745	0.8380
Free (Lys+Met+Thr+Ile)/Asp	<i>SAMS3</i>	-0.0627	0.8634
Free (Lys+Met+Thr+Ile)/Asp	<i>SAMS4</i>	-0.2648	0.4598
Free (Lys+Met+Thr+Ile)/Asp	<i>SAMSs</i>	-0.2563	0.4747
Free (Lys+Met+Thr+Ile)/Asp	<i>TD1</i>	-0.1857	0.6074
Free (Lys+Met+Thr+Ile)/Asp	<i>TD1/BCAT1</i>	-0.2174	0.5463
Free (Lys+Met+Thr+Ile)/Asp	<i>THA1</i>	0.0498	0.8914
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>THA2</b>	<b>0.5188</b>	<b>0.1244</b>
<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>THAs</b>	<b>0.5592</b>	<b>0.0929</b>
Free (Lys+Met+Thr+Ile)/Asp	<i>THAs+TD1</i>	-0.0678	0.8525
Free (Lys+Met+Thr+Ile)/Asp	Thr-sensitive AK activity	-0.3947	0.2590
Free (Lys+Met+Thr+Ile)/Asp	Total free AAs	-0.1756	0.6274
Free (Lys+Met+Thr+Ile)/Asp	<i>TS1</i>	0.1148	0.7522
Free (Lys+Met+Thr+Ile)/Asp	<i>TS1/(THAs+TD1)</i>	0.1118	0.7585
Free (Lys+Met+Thr+Ile)/Asp	<i>TS1/TD1</i>	0.0085	0.9814
Free (Lys+Met+Thr+Ile)/Asp	<i>TS1/THAs</i>	-0.3204	0.3668
Free Ala	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2386	0.5068
<b>Free Ala</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.6008</b>	<b>0.0662</b>
Free Ala	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.2799	0.4334
Free Ala	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2701	0.4504
Free Ala	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2771	0.4382
Free Ala	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.0915	0.8015
<b>Free Ala</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.7341</b>	<b>0.0156</b>
Free Ala	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.2706	0.4495
Free Ala	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.1911	0.5969
Free Ala	AK activity with four effectors	-0.2921	0.4129
Free Ala	AK activity without effectors	-0.3393	0.3375
Free Ala	AK activity/HSDH activity with four effectors	-0.3786	0.2807
Free Ala	AK activity/HSDH activity without effectors	-0.2287	0.5251
Free Ala	<i>AK1</i>	-0.3416	0.3341
Free Ala	<i>AK1+AK2</i>	-0.2211	0.5394
Free Ala	<i>AK1+AK3</i>	0.0161	0.9648
Free Ala	<i>AK2</i>	-0.1416	0.6965
Free Ala	<i>AK2+AK3</i>	-0.0661	0.8560
<b>Free Ala</b>	<b>AK3</b>	<b>0.4188</b>	<b>0.2284</b>
Free Ala	<i>AK-HSDH1</i>	0.0634	0.8618
<b>Free Ala</b>	<b>AK-HSDH2</b>	<b>0.5720</b>	<b>0.0841</b>
<b>Free Ala</b>	<b>AK-HSDHs</b>	<b>0.4083</b>	<b>0.2414</b>
<b>Free Ala</b>	<b>AK-HSDHs+CGS1</b>	<b>0.4769</b>	<b>0.1634</b>
<b>Free Ala</b>	<b>AK-HSDHs+TS1</b>	<b>0.5491</b>	<b>0.1002</b>
<b>Free Ala</b>	<b>AK-HSDHs+TS1+TD1</b>	<b>0.5995</b>	<b>0.0670</b>
<b>Free Ala</b>	<b>AK-HSDHs+TS1+THAs</b>	<b>0.5466</b>	<b>0.1020</b>
Free Ala	<i>AKs</i>	-0.1419	0.6958
Free Ala	<i>AKs/AK-HSDHs</i>	-0.2701	0.4504
Free Ala	<i>AKs+AK-HSDHs</i>	-0.0389	0.9150



Free Ala	<i>AKs+AK-HSDHs+CGS1</i>	0.0675	0.8530
Free Ala	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0079	0.9827
Free Ala	<i>AKs+AK-HSDHs+TS1</i>	0.2228	0.5361
Free Ala	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.2743	0.4431
Free Ala	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.2191	0.5430
Free Ala	<i>AKs+DHDPSs</i>	-0.1094	0.7636
<b>Free Ala</b>	<b><i>BCAT1</i></b>	<b>-0.8230</b>	<b>0.0034</b>
Free Ala	Biosynthetic genes analyzed	0.3023	0.3959
<b>Free Ala</b>	<b>Catabolic genes analyzed</b>	<b>0.5594</b>	<b>0.0927</b>
<b>Free Ala</b>	<b><i>CGS1</i></b>	<b>0.4607</b>	<b>0.1803</b>
Free Ala	<i>CGS1/SAMSs</i>	-0.2927	0.4118
Free Ala	<i>CGS1/TS1</i>	-0.1827	0.6135
<b>Free Ala</b>	<b><i>DHDPS1</i></b>	<b>0.5208</b>	<b>0.1227</b>
<b>Free Ala</b>	<b><i>DHDPS2</i></b>	<b>0.6954</b>	<b>0.0256</b>
<b>Free Ala</b>	<b><i>DHDPSs</i></b>	<b>0.7927</b>	<b>0.0062</b>
Free Ala	<i>DHDPSs/AK-HSDHs</i>	-0.2009	0.5779
<b>Free Ala</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>0.4482</b>	<b>0.1940</b>
Free Ala	HSDH activity with four effectors	0.3057	0.3904
Free Ala	HSDH activity without effectors	0.0413	0.9098
Free Ala	<i>LKR-SDHI</i>	-0.0421	0.9080
<b>Free Ala</b>	<b>Lys-sensitive AK activity</b>	<b>-0.6662</b>	<b>0.0354</b>
Free Ala	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.3442	0.3302
<b>Free Ala</b>	<b><i>SAMS1</i></b>	<b>0.9459</b>	<b>&lt;.0001</b>
<b>Free Ala</b>	<b><i>SAMS2</i></b>	<b>0.7999</b>	<b>0.0055</b>
Free Ala	<i>SAMS3</i>	0.1221	0.7369
<b>Free Ala</b>	<b><i>SAMS4</i></b>	<b>0.6587</b>	<b>0.0384</b>
<b>Free Ala</b>	<b><i>SAMSs</i></b>	<b>0.5576</b>	<b>0.0940</b>
<b>Free Ala</b>	<b><i>TD1</i></b>	<b>0.9292</b>	<b>0.0001</b>
Free Ala	<i>TD1/BCAT1</i>	0.3428	0.3323
Free Ala	<i>THA1</i>	-0.1239	0.7331
Free Ala	<i>THA2</i>	-0.0165	0.9639
Free Ala	<i>THAs</i>	-0.0381	0.9168
<b>Free Ala</b>	<b><i>THAs+TD1</i></b>	<b>0.8908</b>	<b>0.0005</b>
Free Ala	Thr-sensitive AK activity	0.2612	0.4660
<b>Free Ala</b>	<b><i>TS1</i></b>	<b>0.5372</b>	<b>0.1093</b>
<b>Free Ala</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.7254</b>	<b>0.0176</b>
<b>Free Ala</b>	<b><i>TS1/TD1</i></b>	<b>-0.7349</b>	<b>0.0155</b>
<b>Free Ala</b>	<b><i>TS1/THAs</i></b>	<b>0.6195</b>	<b>0.0561</b>
Free Arg	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.0843	0.8169
Free Arg	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.1794	0.6200
<b>Free Arg</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.6721</b>	<b>0.0333</b>
Free Arg	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2553	0.4765
Free Arg	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.0983	0.7871
Free Arg	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.3034	0.3941
Free Arg	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.2582	0.4714
<b>Free Arg</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.6688</b>	<b>0.0345</b>
Free Arg	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.2261	0.5300
Free Arg	AK activity with four effectors	0.2087	0.5628
Free Arg	AK activity without effectors	0.0230	0.9498
Free Arg	AK activity/HSDH activity with four effectors	-0.2225	0.5367
Free Arg	AK activity/HSDH activity without effectors	-0.1733	0.6322
Free Arg	<i>AK1</i>	0.1345	0.7110
Free Arg	<i>AK1+AK2</i>	0.0647	0.8591
Free Arg	<i>AK1+AK3</i>	0.2156	0.5497
Free Arg	<i>AK2</i>	0.0350	0.9236
Free Arg	<i>AK2+AK3</i>	0.0544	0.8813
Free Arg	<i>AK3</i>	0.1175	0.7465

Free Arg	<i>AK-HSDH1</i>	0.1432	0.6932
<b>Free Arg</b>	<b><i>AK-HSDH2</i></b>	<b>0.6775</b>	<b>0.0314</b>
<b>Free Arg</b>	<b><i>AK-HSDHs</i></b>	<b>0.5250</b>	<b>0.1192</b>
<b>Free Arg</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>0.6265</b>	<b>0.0526</b>
<b>Free Arg</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.5858</b>	<b>0.0752</b>
<b>Free Arg</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>0.6060</b>	<b>0.0633</b>
<b>Free Arg</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>0.5878</b>	<b>0.0739</b>
Free Arg	<i>AKs</i>	0.0854	0.8145
Free Arg	<i>AKs/AK-HSDHs</i>	-0.2553	0.4765
Free Arg	<i>AKs+AK-HSDHs</i>	0.2275	0.5274
Free Arg	<i>AKs+AK-HSDHs+CGS1</i>	0.3545	0.3149
Free Arg	<i>AKs+AK-HSDHs+DHDPSs</i>	0.2508	0.4846
<b>Free Arg</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>0.4305</b>	<b>0.2143</b>
<b>Free Arg</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>0.4569</b>	<b>0.1844</b>
<b>Free Arg</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>0.4288</b>	<b>0.2163</b>
Free Arg	<i>AKs+DHDPSs</i>	0.1118	0.7585
<b>Free Arg</b>	<b><i>BCAT1</i></b>	<b>-0.6969</b>	<b>0.0251</b>
<b>Free Arg</b>	<b>Biosynthetic genes analyzed</b>	<b>0.5122</b>	<b>0.1302</b>
<b>Free Arg</b>	<b>Catabolic genes analyzed</b>	<b>0.4800</b>	<b>0.1603</b>
<b>Free Arg</b>	<b><i>CGS1</i></b>	<b>0.6129</b>	<b>0.0596</b>
Free Arg	<i>CGS1/SAMSs</i>	-0.1563	0.6662
Free Arg	<i>CGS1/TS1</i>	-0.1217	0.7377
<b>Free Arg</b>	<b><i>DHDPS1</i></b>	<b>0.4178</b>	<b>0.2295</b>
<b>Free Arg</b>	<b><i>DHDPS2</i></b>	<b>0.6163</b>	<b>0.0578</b>
<b>Free Arg</b>	<b><i>DHDPSs</i></b>	<b>0.6705</b>	<b>0.0339</b>
Free Arg	<i>DHDPSs/AK-HSDHs</i>	-0.3040	0.3931
<b>Free Arg</b>	<b><i>DHDPSs/LKR-SDH1</i></b>	<b>0.5216</b>	<b>0.1220</b>
<b>Free Arg</b>	<b>Free Ala</b>	<b>0.5508</b>	<b>0.0989</b>
<b>Free Arg</b>	<b>HSDH activity with four effectors</b>	<b>0.7239</b>	<b>0.0179</b>
<b>Free Arg</b>	<b>HSDH activity without effectors</b>	<b>0.4088</b>	<b>0.2408</b>
Free Arg	<i>LKR-SDH1</i>	-0.2806	0.4323
Free Arg	Lys-sensitive AK activity	-0.2795	0.4342
Free Arg	Lys-sensitive AK activity/Thr-sensitive AK activity	0.1405	0.6987
<b>Free Arg</b>	<b><i>SAMS1</i></b>	<b>0.4617</b>	<b>0.1792</b>
<b>Free Arg</b>	<b><i>SAMS2</i></b>	<b>0.5620</b>	<b>0.0909</b>
Free Arg	<i>SAMS3</i>	0.3018	0.3968
<b>Free Arg</b>	<b><i>SAMS4</i></b>	<b>0.4869</b>	<b>0.1535</b>
<b>Free Arg</b>	<b><i>SAMSs</i></b>	<b>0.4803</b>	<b>0.1601</b>
<b>Free Arg</b>	<b><i>TD1</i></b>	<b>0.6289</b>	<b>0.0515</b>
<b>Free Arg</b>	<b><i>TD1/BCAT1</i></b>	<b>0.7025</b>	<b>0.0235</b>
<b>Free Arg</b>	<b><i>THA1</i></b>	<b>-0.5257</b>	<b>0.1186</b>
Free Arg	<i>THA2</i>	0.2249	0.5321
Free Arg	<i>THAs</i>	0.1847	0.6095
<b>Free Arg</b>	<b><i>THAs+TD1</i></b>	<b>0.6452</b>	<b>0.0439</b>
Free Arg	Thr-sensitive AK activity	-0.1589	0.6611
<b>Free Arg</b>	<b><i>TS1</i></b>	<b>0.5353</b>	<b>0.1108</b>
Free Arg	<i>TS1/(THAs+TD1)</i>	-0.3530	0.3170
Free Arg	<i>TS1/TD1</i>	-0.2878	0.4201
<b>Free Arg</b>	<b><i>TS1/THAs</i></b>	<b>0.4445</b>	<b>0.1980</b>
Free Asn	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2965	0.4054
<b>Free Asn</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.5612</b>	<b>0.0914</b>
<b>Free Asn</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.4835</b>	<b>0.1569</b>
Free Asn	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.1409	0.6979
Free Asn	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.1369	0.7061
Free Asn	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDH1</i>	0.0503	0.8903
<b>Free Asn</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.5875</b>	<b>0.0741</b>
<b>Free Asn</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.4858</b>	<b>0.1546</b>

Free Asn	(AKs+DHDPSs)/LKR-SDHI	-0.0061	0.9866
Free Asn	AK activity with four effectors	-0.0803	0.8255
Free Asn	AK activity without effectors	-0.2863	0.4225
Free Asn	AK activity/HSDH activity with four effectors	-0.1788	0.6211
Free Asn	AK activity/HSDH activity without effectors	-0.0784	0.8295
Free Asn	AK1	0.0909	0.8027
Free Asn	AK1+AK2	0.0489	0.8933
Free Asn	AK1+AK3	0.3098	0.3837
Free Asn	AK2	0.0290	0.9367
Free Asn	AK2+AK3	0.0777	0.8311
Free Asn	AK3	0.2856	0.4238
Free Asn	AK-HSDH1	-0.0950	0.7940
<b>Free Asn</b>	<b>AK-HSDH2</b>	<b>0.6691</b>	<b>0.0344</b>
Free Asn	AK-HSDHs	0.3836	0.2738
<b>Free Asn</b>	<b>AK-HSDHs+CGS1</b>	<b>0.4402</b>	<b>0.2030</b>
<b>Free Asn</b>	<b>AK-HSDHs+TS1</b>	<b>0.4918</b>	<b>0.1488</b>
<b>Free Asn</b>	<b>AK-HSDHs+TS1+TD1</b>	<b>0.5417</b>	<b>0.1058</b>
<b>Free Asn</b>	<b>AK-HSDHs+TS1+THAs</b>	<b>0.4901</b>	<b>0.1504</b>
Free Asn	AKs	0.1004	0.7826
Free Asn	AKs/AK-HSDHs	-0.1409	0.6979
Free Asn	AKs+AK-HSDHs	0.2062	0.5676
Free Asn	AKs+AK-HSDHs+CGS1	0.2892	0.4178
Free Asn	AKs+AK-HSDHs+DHDPSs	0.2377	0.5083
Free Asn	AKs+AK-HSDHs+TS1	0.3846	0.2725
<b>Free Asn</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>0.4280</b>	<b>0.2172</b>
Free Asn	AKs+AK-HSDHs+TS1+THAs	0.3810	0.2774
Free Asn	AKs+DHDPSs	0.1346	0.7107
<b>Free Asn</b>	<b>BCAT1</b>	<b>-0.9125</b>	<b>0.0002</b>
<b>Free Asn</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4432</b>	<b>0.1996</b>
<b>Free Asn</b>	<b>Catabolic genes analyzed</b>	<b>0.5460</b>	<b>0.1025</b>
<b>Free Asn</b>	<b>CGS1</b>	<b>0.4187</b>	<b>0.2285</b>
Free Asn	CGS1/SAMSs	-0.3463	0.3270
Free Asn	CGS1/TS1	-0.1598	0.6592
<b>Free Asn</b>	<b>DHDPS1</b>	<b>0.6074</b>	<b>0.0625</b>
<b>Free Asn</b>	<b>DHDPS2</b>	<b>0.7181</b>	<b>0.0193</b>
<b>Free Asn</b>	<b>DHDPSs</b>	<b>0.8690</b>	<b>0.0011</b>
Free Asn	DHDPSs/AK-HSDHs	-0.1298	0.7207
<b>Free Asn</b>	<b>DHDPSs/LKR-SDHI</b>	<b>0.4329</b>	<b>0.2114</b>
<b>Free Asn</b>	<b>Free Ala</b>	<b>0.8189</b>	<b>0.0038</b>
<b>Free Asn</b>	<b>Free Arg</b>	<b>0.8292</b>	<b>0.0030</b>
Free Asn	HSDH activity with four effectors	0.3626	0.3032
Free Asn	HSDH activity without effectors	0.0208	0.9546
Free Asn	LKR-SDHI	-0.0764	0.8339
<b>Free Asn</b>	<b>Lys-sensitive AK activity</b>	<b>-0.5284</b>	<b>0.1164</b>
Free Asn	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.0734	0.8402
<b>Free Asn</b>	<b>SAMS1</b>	<b>0.7876</b>	<b>0.0068</b>
<b>Free Asn</b>	<b>SAMS2</b>	<b>0.7706</b>	<b>0.0091</b>
Free Asn	SAMS3	0.2099	0.5605
<b>Free Asn</b>	<b>SAMS4</b>	<b>0.5548</b>	<b>0.0960</b>
<b>Free Asn</b>	<b>SAMSs</b>	<b>0.5454</b>	<b>0.1030</b>
<b>Free Asn</b>	<b>TD1</b>	<b>0.8725</b>	<b>0.0010</b>
<b>Free Asn</b>	<b>TD1/BCAT1</b>	<b>0.5425</b>	<b>0.1052</b>
Free Asn	THA1	-0.3732	0.2881
Free Asn	THA2	0.0204	0.9554
Free Asn	THAs	0.0249	0.9456
<b>Free Asn</b>	<b>THAs+TD1</b>	<b>0.8435</b>	<b>0.0022</b>
Free Asn	Thr-sensitive AK activity	-0.1043	0.7742

<b>Free Asn</b>	<i>TS1</i>	<b>0.4737</b>	<b>0.1667</b>
<b>Free Asn</b>	<i>TS1/(THAs+TD1)</i>	<b>-0.7191</b>	<b>0.0191</b>
<b>Free Asn</b>	<i>TS1/TD1</i>	<b>-0.6808</b>	<b>0.0302</b>
<b>Free Asn</b>	<i>TS1/THAs</i>	<b>0.5903</b>	<b>0.0724</b>
<b>Free Asn+Asp</b>	<i>(AK-HSDHs+CGS1)/SAMSs</i>	<b>-0.4226</b>	<b>0.2237</b>
<b>Free Asn+Asp</b>	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>-0.7038</b>	<b>0.0231</b>
Free Asn+Asp	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.2996	0.4004
Free Asn+Asp	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.0735	0.8401
Free Asn+Asp	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.1940	0.5912
Free Asn+Asp	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.2554	0.4763
<b>Free Asn+Asp</b>	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>-0.7384</b>	<b>0.0147</b>
Free Asn+Asp	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.3024	0.3958
Free Asn+Asp	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.2989	0.4015
<b>Free Asn+Asp</b>	<b>AK activity with four effectors</b>	<b>-0.4406</b>	<b>0.2025</b>
<b>Free Asn+Asp</b>	<b>AK activity without effectors</b>	<b>-0.6301</b>	<b>0.0509</b>
Free Asn+Asp	AK activity/HSDH activity with four effectors	-0.3064	0.3893
Free Asn+Asp	AK activity/HSDH activity without effectors	-0.1617	0.6553
Free Asn+Asp	<i>AK1</i>	0.1112	0.7598
Free Asn+Asp	<i>AK1+AK2</i>	-0.1124	0.7573
Free Asn+Asp	<i>AK1+AK3</i>	0.3351	0.3439
Free Asn+Asp	<i>AK2</i>	-0.1308	0.7188
Free Asn+Asp	<i>AK2+AK3</i>	-0.0759	0.8349
Free Asn+Asp	<i>AK3</i>	0.2976	0.4036
Free Asn+Asp	<i>AK-HSDH1</i>	-0.3015	0.3972
<b>Free Asn+Asp</b>	<b>AK-HSDH2</b>	<b>0.4857</b>	<b>0.1547</b>
Free Asn+Asp	<i>AK-HSDHs</i>	0.1468	0.6857
Free Asn+Asp	<i>AK-HSDHs+CGS1</i>	0.1504	0.6783
Free Asn+Asp	<i>AK-HSDHs+TS1</i>	0.1979	0.5836
Free Asn+Asp	<i>AK-HSDHs+TS1+TD1</i>	0.2579	0.4719
Free Asn+Asp	<i>AK-HSDHs+TS1+THAs</i>	0.1931	0.5930
Free Asn+Asp	<i>AKs</i>	-0.0560	0.8779
Free Asn+Asp	<i>AKs/AK-HSDHs</i>	-0.0735	0.8401
Free Asn+Asp	<i>AKs+AK-HSDHs</i>	-0.0185	0.9595
Free Asn+Asp	<i>AKs+AK-HSDHs+CGS1</i>	0.0103	0.9774
Free Asn+Asp	<i>AKs+AK-HSDHs+DHDPSs</i>	0.0101	0.9779
Free Asn+Asp	<i>AKs+AK-HSDHs+TS1</i>	0.0762	0.8343
Free Asn+Asp	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.1222	0.7367
Free Asn+Asp	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.0719	0.8434
Free Asn+Asp	<i>AKs+DHDPSs</i>	-0.0263	0.9424
<b>Free Asn+Asp</b>	<b>BCAT1</b>	<b>-0.9215</b>	<b>0.0002</b>
Free Asn+Asp	Biosynthetic genes analyzed	0.1114	0.7594
Free Asn+Asp	Catabolic genes analyzed	0.3853	0.2715
Free Asn+Asp	<i>CGS1</i>	0.1285	0.7235
Free Asn+Asp	<i>CGS1/SAMSs</i>	-0.3189	0.3691
Free Asn+Asp	<i>CGS1/TS1</i>	-0.0647	0.8591
<b>Free Asn+Asp</b>	<b>DHDPS1</b>	<b>0.5922</b>	<b>0.0713</b>
<b>Free Asn+Asp</b>	<b>DHDPS2</b>	<b>0.5390</b>	<b>0.1079</b>
<b>Free Asn+Asp</b>	<b>DHDPSs</b>	<b>0.7408</b>	<b>0.0142</b>
Free Asn+Asp	<i>DHDPSs/AK-HSDHs</i>	0.0742	0.8386
Free Asn+Asp	<i>DHDPSs/LKR-SDHI</i>	0.2158	0.5493
<b>Free Asn+Asp</b>	<b>Free Ala</b>	<b>0.8126</b>	<b>0.0043</b>
<b>Free Asn+Asp</b>	<b>Free Arg</b>	<b>0.5758</b>	<b>0.0815</b>
<b>Free Asn+Asp</b>	<b>Free Asn</b>	<b>0.9075</b>	<b>0.0003</b>
<b>Free Asn+Asp</b>	<b>Free Asp</b>	<b>0.9976</b>	<b>&lt;.0001</b>
Free Asn+Asp	Free Cys	0.2664	0.4568
<b>Free Asn+Asp</b>	<b>Free Gln</b>	<b>0.9169</b>	<b>0.0002</b>
<b>Free Asn+Asp</b>	<b>Free Glu</b>	<b>0.8631</b>	<b>0.0013</b>

<b>Free Asn+Asp</b>	<b>Free Gly</b>	<b>0.8556</b>	<b>0.0016</b>
<b>Free Asn+Asp</b>	<b>Free His</b>	<b>0.7471</b>	<b>0.0130</b>
Free Asn+Asp	Free Ile	0.2373	0.5092
<b>Free Asn+Asp</b>	<b>Free Leu</b>	<b>0.7640</b>	<b>0.0101</b>
<b>Free Asn+Asp</b>	<b>Free Lys</b>	<b>0.7455</b>	<b>0.0133</b>
Free Asn+Asp	Free Lys+Met+Thr+Ile	-0.0641	0.8603
<b>Free Asn+Asp</b>	<b>Free Met</b>	<b>0.7433</b>	<b>0.0138</b>
<b>Free Asn+Asp</b>	<b>Free Phe</b>	<b>0.7031</b>	<b>0.0233</b>
<b>Free Asn+Asp</b>	<b>Free Pro</b>	<b>0.9479</b>	<b>&lt;.0001</b>
<b>Free Asn+Asp</b>	<b>Free Ser</b>	<b>0.6913</b>	<b>0.0268</b>
Free Asn+Asp	Free Thr	-0.1046	0.7738
<b>Free Asn+Asp</b>	<b>Free Trp</b>	<b>0.6458</b>	<b>0.0437</b>
<b>Free Asn+Asp</b>	<b>Free Tyr</b>	<b>0.4376</b>	<b>0.2060</b>
<b>Free Asn+Asp</b>	<b>Free Val</b>	<b>0.5221</b>	<b>0.1216</b>
Free Asn+Asp	HSDH activity with four effectors	0.0569	0.8759
Free Asn+Asp	HSDH activity without effectors	-0.2327	0.5176
Free Asn+Asp	<i>LKR-SDHI</i>	0.0996	0.7844
<b>Free Asn+Asp</b>	<b>Lys-sensitive AK activity</b>	<b>-0.7498</b>	<b>0.0125</b>
Free Asn+Asp	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.2026	0.5746
<b>Free Asn+Asp</b>	<b>SAMS1</b>	<b>0.8654</b>	<b>0.0012</b>
<b>Free Asn+Asp</b>	<b>SAMS2</b>	<b>0.6781</b>	<b>0.0312</b>
Free Asn+Asp	<i>SAMS3</i>	-0.0008	0.9983
Free Asn+Asp	<i>SAMS4</i>	0.3736	0.2876
Free Asn+Asp	<i>SAMSs</i>	0.3858	0.2709
<b>Free Asn+Asp</b>	<b>TD1</b>	<b>0.7668</b>	<b>0.0097</b>
Free Asn+Asp	<i>TD1/BCAT1</i>	0.3633	0.3022
Free Asn+Asp	<i>THA1</i>	-0.1193	0.7428
Free Asn+Asp	<i>THA2</i>	-0.2035	0.5729
Free Asn+Asp	<i>THAs</i>	-0.1699	0.6389
<b>Free Asn+Asp</b>	<b>THAs+TD1</b>	<b>0.7010</b>	<b>0.0239</b>
Free Asn+Asp	Thr-sensitive AK activity	-0.0837	0.8182
<b>Free Asn+Asp</b>	<b>Total free AAs</b>	<b>0.9386</b>	<b>&lt;.0001</b>
Free Asn+Asp	<i>TS1</i>	0.1933	0.5925
<b>Free Asn+Asp</b>	<b>TS1/(THAs+TD1)</b>	<b>-0.8048</b>	<b>0.0050</b>
<b>Free Asn+Asp</b>	<b>TS1/TD1</b>	<b>-0.7767</b>	<b>0.0082</b>
<b>Free Asn+Asp</b>	<b>TS1/THAs</b>	<b>0.5266</b>	<b>0.1179</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2974	0.4039
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.5820</b>	<b>0.0775</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.0481	0.8950
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>0.5553</b>	<b>0.0956</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.4323</b>	<b>0.2122</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.3139	0.3772
Free Asn+Asp+Lys+Met+Thr+Ile	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.3266	0.3570
Free Asn+Asp+Lys+Met+Thr+Ile	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.0681	0.8518
Free Asn+Asp+Lys+Met+Thr+Ile	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.2033	0.5733
Free Asn+Asp+Lys+Met+Thr+Ile	AK activity with four effectors	0.0265	0.9420
Free Asn+Asp+Lys+Met+Thr+Ile	AK activity without effectors	0.0429	0.9064
Free Asn+Asp+Lys+Met+Thr+Ile	AK activity/HSDH activity with four effectors	0.2754	0.4413
Free Asn+Asp+Lys+Met+Thr+Ile	AK activity/HSDH activity without effectors	0.2761	0.4400
Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK1</i>	0.0895	0.8059
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AK1+AK2</b>	<b>0.5228</b>	<b>0.1210</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK1+AK3</i>	0.2037	0.5724
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AK2</b>	<b>0.4850</b>	<b>0.1554</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AK2+AK3</b>	<b>0.4969</b>	<b>0.1440</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK3</i>	0.1416	0.6964
Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK-HSDH1</i>	-0.3919	0.2627
Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK-HSDH2</i>	-0.1835	0.6119
Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK-HSDHs</i>	-0.3398	0.3367

Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK-HSDHs+CGSI</i>	-0.2980	0.4030
Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK-HSDHs+TSI</i>	0.0892	0.8065
Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK-HSDHs+TSI+TDI</i>	0.1262	0.7283
Free Asn+Asp+Lys+Met+Thr+Ile	<i>AK-HSDHs+TSI+THAs</i>	0.0984	0.7868
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AKs</b>	<b>0.5403</b>	<b>0.1069</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AKs/AK-HSDHs</b>	<b>0.5553</b>	<b>0.0956</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs</b>	<b>0.4723</b>	<b>0.1681</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+CGSI</b>	<b>0.4023</b>	<b>0.2491</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>0.4875</b>	<b>0.1529</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+TSI</b>	<b>0.4958</b>	<b>0.1450</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+TSI+TDI</b>	<b>0.5080</b>	<b>0.1338</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+TSI+THAs</b>	<b>0.4988</b>	<b>0.1422</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>AKs+DHDPSs</b>	<b>0.5576</b>	<b>0.0940</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>BCATI</b>	<b>-0.4386</b>	<b>0.2048</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4290</b>	<b>0.2161</b>
Free Asn+Asp+Lys+Met+Thr+Ile	Catabolic genes analyzed	-0.0963	0.7912
Free Asn+Asp+Lys+Met+Thr+Ile	<i>CGSI</i>	-0.1898	0.5995
Free Asn+Asp+Lys+Met+Thr+Ile	<i>CGSI/SAMSs</i>	0.0036	0.9921
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>CGSI/TSI</b>	<b>-0.4042</b>	<b>0.2467</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>DHDPSI</b>	<b>0.7878</b>	<b>0.0068</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>DHDPS2</i>	0.0362	0.9210
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>DHDPSs</b>	<b>0.5129</b>	<b>0.1295</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>DHDPSs/AK-HSDHs</b>	<b>0.5460</b>	<b>0.1025</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>DHDPSs/LKR-SDHI</i>	-0.3392	0.3377
Free Asn+Asp+Lys+Met+Thr+Ile	Free Ala	0.2253	0.5314
Free Asn+Asp+Lys+Met+Thr+Ile	Free Arg	0.2261	0.5299
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Free Asn</b>	<b>0.4488</b>	<b>0.1933</b>
Free Asn+Asp+Lys+Met+Thr+Ile	Free Asn+Asp	0.3962	0.2570
Free Asn+Asp+Lys+Met+Thr+Ile	Free Asp	0.3837	0.2736
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Free Cys</b>	<b>0.9149</b>	<b>0.0002</b>
Free Asn+Asp+Lys+Met+Thr+Ile	Free Gln	0.3774	0.2823
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Free Glu</b>	<b>0.5920</b>	<b>0.0714</b>
Free Asn+Asp+Lys+Met+Thr+Ile	Free Gly	0.3023	0.3960
Free Asn+Asp+Lys+Met+Thr+Ile	Free His	0.3341	0.3454
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Free Ile</b>	<b>0.5709</b>	<b>0.0848</b>
Free Asn+Asp+Lys+Met+Thr+Ile	Free Leu	0.2423	0.5000
Free Asn+Asp+Lys+Met+Thr+Ile	Free Lys	0.3236	0.3618
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>0.8908</b>	<b>0.0005</b>
Free Asn+Asp+Lys+Met+Thr+Ile	Free Met	0.2274	0.5275
Free Asn+Asp+Lys+Met+Thr+Ile	Free Phe	0.0867	0.8117
Free Asn+Asp+Lys+Met+Thr+Ile	Free Pro	0.3371	0.3408
Free Asn+Asp+Lys+Met+Thr+Ile	Free Ser	-0.1217	0.7377
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Free Thr</b>	<b>0.8708</b>	<b>0.0010</b>
Free Asn+Asp+Lys+Met+Thr+Ile	Free Trp	-0.0192	0.9581
Free Asn+Asp+Lys+Met+Thr+Ile	Free Tyr	-0.0530	0.8844
Free Asn+Asp+Lys+Met+Thr+Ile	Free Val	0.0303	0.9337
Free Asn+Asp+Lys+Met+Thr+Ile	HSDH activity with four effectors	-0.2492	0.4875
Free Asn+Asp+Lys+Met+Thr+Ile	HSDH activity without effectors	-0.2625	0.4638
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>LKR-SDHI</b>	<b>0.6325</b>	<b>0.0497</b>
Free Asn+Asp+Lys+Met+Thr+Ile	Lys-sensitive AK activity	0.1292	0.7221
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.4679</b>	<b>0.1726</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>SAMS1</i>	0.2008	0.5781
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>SAMS2</b>	<b>0.6905</b>	<b>0.0271</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>SAMS3</i>	-0.2390	0.5061
Free Asn+Asp+Lys+Met+Thr+Ile	<i>SAMS4</i>	-0.0873	0.8105
Free Asn+Asp+Lys+Met+Thr+Ile	<i>SAMSs</i>	-0.1008	0.7817
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>TDI</b>	<b>0.4139</b>	<b>0.2344</b>

Free Asn+Asp+Lys+Met+Thr+Ile	<i>TD1/BCAT1</i>	0.0702	0.8472
Free Asn+Asp+Lys+Met+Thr+Ile	<i>THA1</i>	0.0903	0.8040
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b><i>THA2</i></b>	<b>0.4030</b>	<b>0.2482</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b><i>THAs</i></b>	<b>0.4925</b>	<b>0.1481</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b><i>THAs+TD1</i></b>	<b>0.4928</b>	<b>0.1478</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Thr-sensitive AK activity</b>	<b>-0.5445</b>	<b>0.1037</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>Total free AAs</b>	<b>0.6296</b>	<b>0.0511</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>TS1</i>	0.2668	0.4561
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.5388</b>	<b>0.1080</b>
<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b><i>TS1/TD1</i></b>	<b>-0.5866</b>	<b>0.0747</b>
Free Asn+Asp+Lys+Met+Thr+Ile	<i>TS1/THAs</i>	0.0283	0.9381
Free Asn+Asp+Lys+Thr+Ile	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2989	0.4015
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.5748</b>	<b>0.0822</b>
Free Asn+Asp+Lys+Thr+Ile	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.0420	0.9082
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>0.5566</b>	<b>0.0947</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.4338</b>	<b>0.2104</b>
Free Asn+Asp+Lys+Thr+Ile	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.3133	0.3781
Free Asn+Asp+Lys+Thr+Ile	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.3190	0.3690
Free Asn+Asp+Lys+Thr+Ile	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.0620	0.8648
Free Asn+Asp+Lys+Thr+Ile	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.2024	0.5749
Free Asn+Asp+Lys+Thr+Ile	AK activity with four effectors	0.0278	0.9393
Free Asn+Asp+Lys+Thr+Ile	AK activity without effectors	0.0448	0.9022
Free Asn+Asp+Lys+Thr+Ile	AK activity/HSDH activity with four effectors	0.2778	0.4370
Free Asn+Asp+Lys+Thr+Ile	AK activity/HSDH activity without effectors	0.2770	0.4384
Free Asn+Asp+Lys+Thr+Ile	<i>AK1</i>	0.0954	0.7932
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AK1+AK2</i></b>	<b>0.5239</b>	<b>0.1201</b>
Free Asn+Asp+Lys+Thr+Ile	<i>AK1+AK3</i>	0.2088	0.5627
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AK2</i></b>	<b>0.4848</b>	<b>0.1556</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AK2+AK3</i></b>	<b>0.4966</b>	<b>0.1442</b>
Free Asn+Asp+Lys+Thr+Ile	<i>AK3</i>	0.1410	0.6976
Free Asn+Asp+Lys+Thr+Ile	<i>AK-HSDH1</i>	-0.3901	0.2652
Free Asn+Asp+Lys+Thr+Ile	<i>AK-HSDH2</i>	-0.1880	0.6029
Free Asn+Asp+Lys+Thr+Ile	<i>AK-HSDHs</i>	-0.3418	0.3337
Free Asn+Asp+Lys+Thr+Ile	<i>AK-HSDHs+CGS1</i>	-0.3032	0.3945
Free Asn+Asp+Lys+Thr+Ile	<i>AK-HSDHs+TS1</i>	0.0855	0.8143
Free Asn+Asp+Lys+Thr+Ile	<i>AK-HSDHs+TS1+TD1</i>	0.1221	0.7368
Free Asn+Asp+Lys+Thr+Ile	<i>AK-HSDHs+TS1+THAs</i>	0.0947	0.7947
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AKs</i></b>	<b>0.5413</b>	<b>0.1061</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>0.5566</b>	<b>0.0947</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.4728</b>	<b>0.1676</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b>0.4011</b>	<b>0.2507</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>0.4878</b>	<b>0.1526</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>0.4944</b>	<b>0.1464</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>0.5062</b>	<b>0.1355</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>0.4974</b>	<b>0.1436</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>AKs+DHDPSs</i></b>	<b>0.5584</b>	<b>0.0934</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>BCAT1</i></b>	<b>-0.4303</b>	<b>0.2145</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4262</b>	<b>0.2194</b>
Free Asn+Asp+Lys+Thr+Ile	Catabolic genes analyzed	-0.1003	0.7829
Free Asn+Asp+Lys+Thr+Ile	<i>CGS1</i>	-0.1974	0.5847
Free Asn+Asp+Lys+Thr+Ile	<i>CGS1/SAMSs</i>	0.0021	0.9954
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>CGS1/TS1</i></b>	<b>-0.4070</b>	<b>0.2431</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>DHDPS1</i></b>	<b>0.7857</b>	<b>0.0071</b>
Free Asn+Asp+Lys+Thr+Ile	<i>DHDPS2</i>	0.0299	0.9346
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>DHDPSs</i></b>	<b>0.5075</b>	<b>0.1343</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b><i>DHDPSs/AK-HSDHs</i></b>	<b>0.5470</b>	<b>0.1018</b>
Free Asn+Asp+Lys+Thr+Ile	<i>DHDPSs/LKR-SDHI</i>	-0.3428	0.3322

Free Asn+Asp+Lys+Thr+Ile	Free Ala	0.2168	0.5475
Free Asn+Asp+Lys+Thr+Ile	Free Arg	0.2203	0.5408
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Free Asn</b>	<b>0.4418</b>	<b>0.2011</b>
Free Asn+Asp+Lys+Thr+Ile	Free Asn+Asp	0.3896	0.2658
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>0.9999</b>	<b>&lt;.0001</b>
Free Asn+Asp+Lys+Thr+Ile	Free Asp	0.3773	0.2825
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Free Cys</b>	<b>0.9165</b>	<b>0.0002</b>
Free Asn+Asp+Lys+Thr+Ile	Free Gln	0.3708	0.2915
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Free Glu</b>	<b>0.5877</b>	<b>0.0740</b>
Free Asn+Asp+Lys+Thr+Ile	Free Gly	0.2982	0.4027
Free Asn+Asp+Lys+Thr+Ile	Free His	0.3262	0.3576
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Free Ile</b>	<b>0.5655</b>	<b>0.0885</b>
Free Asn+Asp+Lys+Thr+Ile	Free Leu	0.2332	0.5168
Free Asn+Asp+Lys+Thr+Ile	Free Lys	0.3143	0.3765
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>0.8941</b>	<b>0.0005</b>
Free Asn+Asp+Lys+Thr+Ile	Free Met	0.2187	0.5438
Free Asn+Asp+Lys+Thr+Ile	Free Phe	0.0777	0.8311
Free Asn+Asp+Lys+Thr+Ile	Free Pro	0.3305	0.3510
Free Asn+Asp+Lys+Thr+Ile	Free Ser	-0.1251	0.7306
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Free Thr</b>	<b>0.8746</b>	<b>0.0009</b>
Free Asn+Asp+Lys+Thr+Ile	Free Trp	-0.0272	0.9406
Free Asn+Asp+Lys+Thr+Ile	Free Tyr	-0.0629	0.8629
Free Asn+Asp+Lys+Thr+Ile	Free Val	0.0229	0.9498
Free Asn+Asp+Lys+Thr+Ile	HSDH activity with four effectors	-0.2527	0.4811
Free Asn+Asp+Lys+Thr+Ile	HSDH activity without effectors	-0.2632	0.4625
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>LKR-SDHI</b>	<b>0.6346</b>	<b>0.0487</b>
Free Asn+Asp+Lys+Thr+Ile	Lys-sensitive AK activity	0.1343	0.7114
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.4691</b>	<b>0.1714</b>
Free Asn+Asp+Lys+Thr+Ile	SAMS1	0.1920	0.5952
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>SAMS2</b>	<b>0.6850</b>	<b>0.0288</b>
Free Asn+Asp+Lys+Thr+Ile	SAMS3	-0.2387	0.5066
Free Asn+Asp+Lys+Thr+Ile	SAMS4	-0.0923	0.7999
Free Asn+Asp+Lys+Thr+Ile	SAMSs	-0.1047	0.7734
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>TD1</b>	<b>0.4065</b>	<b>0.2437</b>
Free Asn+Asp+Lys+Thr+Ile	TD1/BCAT1	0.0637	0.8611
Free Asn+Asp+Lys+Thr+Ile	THA1	0.0935	0.7972
Free Asn+Asp+Lys+Thr+Ile	THA2	0.3995	0.2527
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>THAs</b>	<b>0.4895</b>	<b>0.1510</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>THAs+TD1</b>	<b>0.4851</b>	<b>0.1553</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Thr-sensitive AK activity</b>	<b>-0.5457</b>	<b>0.1027</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>Total free AAs</b>	<b>0.6241</b>	<b>0.0538</b>
Free Asn+Asp+Lys+Thr+Ile	TS1	0.2629	0.4630
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>TS1/(THAs+TD1)</b>	<b>-0.5312</b>	<b>0.1141</b>
<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>TS1/TD1</b>	<b>-0.5787</b>	<b>0.0796</b>
Free Asn+Asp+Lys+Thr+Ile	TS1/THAs	0.0265	0.9421
<b>Free Asp</b>	<b>(AK-HSDHs+CGS1)/SAMSs</b>	<b>-0.4380</b>	<b>0.2054</b>
<b>Free Asp</b>	<b>(AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.7189</b>	<b>0.0191</b>
Free Asp	(AK-HSDHs+TS1+TD1)/BCAT1	0.2599	0.4683
Free Asp	(AKs+AK-HSDHs)/AK-HSDHs	-0.0582	0.8730
Free Asp	(AKs+AK-HSDHs+CGS1)/SAMSs	-0.2004	0.5788
Free Asp	(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI	-0.3023	0.3959
<b>Free Asp</b>	<b>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.7528</b>	<b>0.0120</b>
Free Asp	(AKs+AK-HSDHs+TS1+TD1)/BCAT1	0.2627	0.4634
Free Asp	(AKs+DHDPSs)/LKR-SDHI	-0.3430	0.3319
<b>Free Asp</b>	<b>AK activity with four effectors</b>	<b>-0.4902</b>	<b>0.1504</b>
<b>Free Asp</b>	<b>AK activity without effectors</b>	<b>-0.6725</b>	<b>0.0331</b>
Free Asp	AK activity/HSDH activity with four effectors	-0.3205	0.3665
Free Asp	AK activity/HSDH activity without effectors	-0.1713	0.6360



Free Asp	<i>AK1</i>	0.1128	0.7564
Free Asp	<i>AK1+AK2</i>	-0.1378	0.7043
Free Asp	<i>AK1+AK3</i>	0.3353	0.3436
Free Asp	<i>AK2</i>	-0.1556	0.6678
Free Asp	<i>AK2+AK3</i>	-0.1003	0.7828
Free Asp	<i>AK3</i>	0.2965	0.4056
Free Asp	<i>AK-HSDH1</i>	-0.3304	0.3511
<b>Free Asp</b>	<b><i>AK-HSDH2</i></b>	<b>0.4452</b>	<b>0.1972</b>
Free Asp	<i>AK-HSDHs</i>	0.1040	0.7750
Free Asp	<i>AK-HSDHs+CGS1</i>	0.1000	0.7835
Free Asp	<i>AK-HSDHs+TS1</i>	0.1425	0.6945
Free Asp	<i>AK-HSDHs+TS1+TD1</i>	0.2034	0.5731
Free Asp	<i>AK-HSDHs+TS1+THAs</i>	0.1373	0.7052
Free Asp	<i>AKs</i>	-0.0812	0.8236
Free Asp	<i>AKs/AK-HSDHs</i>	-0.0582	0.8730
Free Asp	<i>AKs+AK-HSDHs</i>	-0.0559	0.8780
Free Asp	<i>AKs+AK-HSDHs+CGS1</i>	-0.0362	0.9208
Free Asp	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0284	0.9379
Free Asp	<i>AKs+AK-HSDHs+TS1</i>	0.0215	0.9530
Free Asp	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.0672	0.8536
Free Asp	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.0173	0.9621
Free Asp	<i>AKs+DHDPSs</i>	-0.0529	0.8845
<b>Free Asp</b>	<b><i>BCAT1</i></b>	<b>-0.9081</b>	<b>0.0003</b>
Free Asp	Biosynthetic genes analyzed	0.0526	0.8853
Free Asp	Catabolic genes analyzed	0.3544	0.3150
Free Asp	<i>CGS1</i>	0.0795	0.8271
Free Asp	<i>CGS1/SAMSs</i>	-0.3087	0.3855
Free Asp	<i>CGS1/TS1</i>	-0.0417	0.9090
<b>Free Asp</b>	<b><i>DHDPS1</i></b>	<b>0.5788</b>	<b>0.0795</b>
<b>Free Asp</b>	<b><i>DHDPS2</i></b>	<b>0.4963</b>	<b>0.1446</b>
<b>Free Asp</b>	<b><i>DHDPSs</i></b>	<b>0.7041</b>	<b>0.0230</b>
Free Asp	<i>DHDPSs/AK-HSDHs</i>	0.1075	0.7675
Free Asp	<i>DHDPSs/LKR-SDH1</i>	0.1750	0.6287
<b>Free Asp</b>	<b>Free Ala</b>	<b>0.7967</b>	<b>0.0058</b>
<b>Free Asp</b>	<b>Free Arg</b>	<b>0.5252</b>	<b>0.1190</b>
<b>Free Asp</b>	<b>Free Asn</b>	<b>0.8771</b>	<b>0.0009</b>
Free Asp	HSDH activity with four effectors	0.0064	0.9859
Free Asp	HSDH activity without effectors	-0.2693	0.4518
Free Asp	<i>LKR-SDH1</i>	0.1261	0.7285
<b>Free Asp</b>	<b>Lys-sensitive AK activity</b>	<b>-0.7734</b>	<b>0.0087</b>
Free Asp	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.2125	0.5556
<b>Free Asp</b>	<b><i>SAMS1</i></b>	<b>0.8645</b>	<b>0.0012</b>
<b>Free Asp</b>	<b><i>SAMS2</i></b>	<b>0.6511</b>	<b>0.0414</b>
Free Asp	<i>SAMS3</i>	-0.0332	0.9275
Free Asp	<i>SAMS4</i>	0.3379	0.3396
Free Asp	<i>SAMSs</i>	0.3550	0.3141
<b>Free Asp</b>	<b><i>TD1</i></b>	<b>0.7361</b>	<b>0.0152</b>
Free Asp	<i>TD1/BCAT1</i>	0.3237	0.3616
Free Asp	<i>THA1</i>	-0.0806	0.8248
Free Asp	<i>THA2</i>	-0.2323	0.5184
Free Asp	<i>THAs</i>	-0.1957	0.5880
<b>Free Asp</b>	<b><i>THAs+TD1</i></b>	<b>0.6661</b>	<b>0.0355</b>
Free Asp	Thr-sensitive AK activity	-0.0877	0.8095
Free Asp	<i>TS1</i>	0.1396	0.7005
<b>Free Asp</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.8100</b>	<b>0.0045</b>
<b>Free Asp</b>	<b><i>TS1/TD1</i></b>	<b>-0.7810</b>	<b>0.0077</b>
<b>Free Asp</b>	<b><i>TS1/THAs</i></b>	<b>0.5073</b>	<b>0.1345</b>

Free Asp+Lys+Met+Thr+Ile	(AK-HSDHs+CGS1)/SAMs	-0.2873	0.4208
<b>Free Asp+Lys+Met+Thr+Ile</b>	(AK-HSDHs+TS1)/(THAs+TD1)	<b>-0.5594</b>	<b>0.0927</b>
Free Asp+Lys+Met+Thr+Ile	(AK-HSDHs+TS1+TD1)/BCAT1	0.0151	0.9670
<b>Free Asp+Lys+Met+Thr+Ile</b>	(AKs+AK-HSDHs)/AK-HSDHs	<b>0.5789</b>	<b>0.0795</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	(AKs+AK-HSDHs+CGS1)/SAMs	<b>0.4514</b>	<b>0.1903</b>
Free Asp+Lys+Met+Thr+Ile	(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI	-0.3286	0.3539
Free Asp+Lys+Met+Thr+Ile	(AKs+AK-HSDHs+TS1)/(THAs+TD1)	-0.2967	0.4052
Free Asp+Lys+Met+Thr+Ile	(AKs+AK-HSDHs+TS1+TD1)/BCAT1	0.0353	0.9229
Free Asp+Lys+Met+Thr+Ile	(AKs+DHDPSs)/LKR-SDHI	-0.2117	0.5571
Free Asp+Lys+Met+Thr+Ile	AK activity with four effectors	0.0311	0.9320
Free Asp+Lys+Met+Thr+Ile	AK activity without effectors	0.0635	0.8617
Free Asp+Lys+Met+Thr+Ile	AK activity/HSDH activity with four effectors	0.2927	0.4118
Free Asp+Lys+Met+Thr+Ile	AK activity/HSDH activity without effectors	0.2855	0.4239
Free Asp+Lys+Met+Thr+Ile	AK1	0.0871	0.8109
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AK1+AK2</b>	<b>0.5313</b>	<b>0.1140</b>
Free Asp+Lys+Met+Thr+Ile	AK1+AK3	0.1884	0.6022
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AK2</b>	<b>0.4936</b>	<b>0.1471</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AK2+AK3</b>	<b>0.5023</b>	<b>0.1390</b>
Free Asp+Lys+Met+Thr+Ile	AK3	0.1246	0.7316
Free Asp+Lys+Met+Thr+Ile	AK-HSDHI	-0.3936	0.2604
Free Asp+Lys+Met+Thr+Ile	AK-HSDH2	-0.2367	0.5103
Free Asp+Lys+Met+Thr+Ile	AK-HSDHs	-0.3755	0.2849
Free Asp+Lys+Met+Thr+Ile	AK-HSDHs+CGS1	-0.3372	0.3407
Free Asp+Lys+Met+Thr+Ile	AK-HSDHs+TS1	0.0579	0.8738
Free Asp+Lys+Met+Thr+Ile	AK-HSDHs+TS1+TD1	0.0925	0.7993
Free Asp+Lys+Met+Thr+Ile	AK-HSDHs+TS1+THAs	0.0675	0.8530
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AKs</b>	<b>0.5456</b>	<b>0.1028</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AKs/AK-HSDHs</b>	<b>0.5789</b>	<b>0.0795</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs</b>	<b>0.4684</b>	<b>0.1722</b>
Free Asp+Lys+Met+Thr+Ile	AKs+AK-HSDHs+CGS1	0.3905	0.2645
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>0.4818</b>	<b>0.1585</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+TS1</b>	<b>0.4809</b>	<b>0.1595</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>0.4905</b>	<b>0.1500</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+TS1+THAs</b>	<b>0.4842</b>	<b>0.1562</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>AKs+DHDPSs</b>	<b>0.5610</b>	<b>0.0915</b>
Free Asp+Lys+Met+Thr+Ile	BCAT1	-0.3872	0.2689
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4081</b>	<b>0.2417</b>
Free Asp+Lys+Met+Thr+Ile	Catabolic genes analyzed	-0.1358	0.7083
Free Asp+Lys+Met+Thr+Ile	CGS1	-0.2253	0.5315
Free Asp+Lys+Met+Thr+Ile	CGS1/SAMs	0.0260	0.9431
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>CGS1/TS1</b>	<b>-0.4065</b>	<b>0.2437</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>DHDPS1</b>	<b>0.7702</b>	<b>0.0091</b>
Free Asp+Lys+Met+Thr+Ile	DHDPS2	-0.0140	0.9694
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>DHDPSs</b>	<b>0.4676</b>	<b>0.1730</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>DHDPSs/AK-HSDHs</b>	<b>0.5700</b>	<b>0.0854</b>
Free Asp+Lys+Met+Thr+Ile	DHDPSs/LKR-SDHI	-0.3788	0.2804
Free Asp+Lys+Met+Thr+Ile	Free Ala	0.1750	0.6287
Free Asp+Lys+Met+Thr+Ile	Free Arg	0.1746	0.6295
Free Asp+Lys+Met+Thr+Ile	Free Asn	0.3917	0.2630
Free Asp+Lys+Met+Thr+Ile	Free Asn+Asp	0.3441	0.3302
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>0.9980</b>	<b>&lt;.0001</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>0.9984</b>	<b>&lt;.0001</b>
Free Asp+Lys+Met+Thr+Ile	Free Asp	0.3335	0.3463
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Free Cys</b>	<b>0.9177</b>	<b>0.0002</b>
Free Asp+Lys+Met+Thr+Ile	Free Gln	0.3206	0.3665
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Free Glu</b>	<b>0.5512</b>	<b>0.0986</b>
Free Asp+Lys+Met+Thr+Ile	Free Gly	0.2575	0.4726

Free Asp+Lys+Met+Thr+Ile	Free His	0.2773	0.4379
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Free Ile</b>	<b>0.5580</b>	<b>0.0937</b>
Free Asp+Lys+Met+Thr+Ile	Free Leu	0.1871	0.6047
Free Asp+Lys+Met+Thr+Ile	Free Lys	0.2705	0.4497
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>0.9145</b>	<b>0.0002</b>
Free Asp+Lys+Met+Thr+Ile	Free Met	0.1842	0.6104
Free Asp+Lys+Met+Thr+Ile	Free Phe	0.0313	0.9315
Free Asp+Lys+Met+Thr+Ile	Free Pro	0.2805	0.4324
Free Asp+Lys+Met+Thr+Ile	Free Ser	-0.1643	0.6502
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Free Thr</b>	<b>0.8973</b>	<b>0.0004</b>
Free Asp+Lys+Met+Thr+Ile	Free Trp	-0.0719	0.8434
Free Asp+Lys+Met+Thr+Ile	Free Tyr	-0.0952	0.7937
Free Asp+Lys+Met+Thr+Ile	Free Val	-0.0181	0.9605
Free Asp+Lys+Met+Thr+Ile	HSDH activity with four effectors	-0.2801	0.4331
Free Asp+Lys+Met+Thr+Ile	HSDH activity without effectors	-0.2683	0.4536
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>LKR-SDHI</b>	<b>0.6564</b>	<b>0.0392</b>
Free Asp+Lys+Met+Thr+Ile	Lys-sensitive AK activity	0.1681	0.6426
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.4862</b>	<b>0.1542</b>
Free Asp+Lys+Met+Thr+Ile	SAMS1	0.1520	0.6751
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>SAMS2</b>	<b>0.6575</b>	<b>0.0388</b>
Free Asp+Lys+Met+Thr+Ile	SAMS3	-0.2590	0.4699
Free Asp+Lys+Met+Thr+Ile	SAMS4	-0.1278	0.7251
Free Asp+Lys+Met+Thr+Ile	SAMSs	-0.1404	0.6989
Free Asp+Lys+Met+Thr+Ile	TD1	0.3653	0.2993
Free Asp+Lys+Met+Thr+Ile	TD1/BCAT1	0.0338	0.9261
Free Asp+Lys+Met+Thr+Ile	THA1	0.1199	0.7414
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>THA2</b>	<b>0.4125</b>	<b>0.2362</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>THAs</b>	<b>0.5038</b>	<b>0.1376</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>THAs+TD1</b>	<b>0.4484</b>	<b>0.1937</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Thr-sensitive AK activity</b>	<b>-0.5534</b>	<b>0.0971</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>Total free AAs</b>	<b>0.5814</b>	<b>0.0779</b>
Free Asp+Lys+Met+Thr+Ile	TS1	0.2417	0.5011
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>TS1/(THAs+TD1)</b>	<b>-0.5041</b>	<b>0.1374</b>
<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>TS1/TD1</b>	<b>-0.5561</b>	<b>0.0951</b>
Free Asp+Lys+Met+Thr+Ile	TS1/THAs	-0.0094	0.9795
Free Cys	(AK-HSDHs+CGS1)/SAMSs	-0.3715	0.2905
<b>Free Cys</b>	<b>(AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.4118</b>	<b>0.2371</b>
Free Cys	(AK-HSDHs+TS1+TD1)/BCAT1	0.1772	0.6244
<b>Free Cys</b>	<b>(AKs+AK-HSDHs)/AK-HSDHs</b>	<b>0.4512</b>	<b>0.1906</b>
Free Cys	(AKs+AK-HSDHs+CGS1)/SAMSs	0.3603	0.3064
Free Cys	(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI	-0.1706	0.6374
Free Cys	(AKs+AK-HSDHs+TS1)/(THAs+TD1)	-0.1681	0.6426
Free Cys	(AKs+AK-HSDHs+TS1+TD1)/BCAT1	0.1956	0.5882
Free Cys	(AKs+DHDPSs)/LKR-SDHI	-0.0634	0.8619
Free Cys	AK activity with four effectors	0.1777	0.6232
Free Cys	AK activity without effectors	0.1297	0.7210
Free Cys	AK activity/HSDH activity with four effectors	0.3667	0.2973
Free Cys	AK activity/HSDH activity without effectors	0.2602	0.4679
Free Cys	AK1	0.3526	0.3177
<b>Free Cys</b>	<b>AK1+AK2</b>	<b>0.5648</b>	<b>0.0889</b>
Free Cys	AK1+AK3	0.2034	0.5730
<b>Free Cys</b>	<b>AK2</b>	<b>0.4710</b>	<b>0.1694</b>
<b>Free Cys</b>	<b>AK2+AK3</b>	<b>0.4306</b>	<b>0.2142</b>
Free Cys	AK3	-0.1659	0.6469
Free Cys	AK-HSDH1	-0.2979	0.4032
Free Cys	AK-HSDH2	-0.1579	0.6630
Free Cys	AK-HSDHs	-0.2691	0.4521

Free Cys	<i>AK-HSDHs+CGS1</i>	-0.2617	0.4651
Free Cys	<i>AK-HSDHs+TS1</i>	0.0296	0.9354
Free Cys	<i>AK-HSDHs+TS1+TD1</i>	0.0553	0.8794
Free Cys	<i>AK-HSDHs+TS1+THAs</i>	0.0361	0.9212
<b>Free Cys</b>	<b>AKs</b>	<b>0.5261</b>	<b>0.1183</b>
<b>Free Cys</b>	<b>AKs/AK-HSDHs</b>	<b>0.4512</b>	<b>0.1906</b>
<b>Free Cys</b>	<b>AKs+AK-HSDHs</b>	<b>0.4764</b>	<b>0.1640</b>
<b>Free Cys</b>	<b>AKs+AK-HSDHs+CGS1</b>	<b>0.4041</b>	<b>0.2468</b>
<b>Free Cys</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>0.4890</b>	<b>0.1515</b>
<b>Free Cys</b>	<b>AKs+AK-HSDHs+TS1</b>	<b>0.4473</b>	<b>0.1949</b>
<b>Free Cys</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>0.4513</b>	<b>0.1904</b>
<b>Free Cys</b>	<b>AKs+AK-HSDHs+TS1+THAs</b>	<b>0.4495</b>	<b>0.1925</b>
<b>Free Cys</b>	<b>AKs+DHDPSs</b>	<b>0.5409</b>	<b>0.1064</b>
Free Cys	<i>BCAT1</i>	-0.2943	0.4091
Free Cys	Biosynthetic genes analyzed	0.3819	0.2761
Free Cys	Catabolic genes analyzed	-0.0228	0.9502
Free Cys	<i>CGS1</i>	-0.1975	0.5845
Free Cys	<i>CGS1/SAMSs</i>	-0.1226	0.7357
Free Cys	<i>CGS1/TS1</i>	-0.3329	0.3472
<b>Free Cys</b>	<b>DHDPS1</b>	<b>0.6730</b>	<b>0.0329</b>
Free Cys	<i>DHDPS2</i>	0.0254	0.9444
<b>Free Cys</b>	<b>DHDPSs</b>	<b>0.4412</b>	<b>0.2018</b>
Free Cys	<i>DHDPSs/AK-HSDHs</i>	0.3939	0.2600
Free Cys	<i>DHDPSs/LKR-SDHI</i>	-0.2429	0.4989
Free Cys	Free Ala	0.0143	0.9688
Free Cys	Free Arg	0.1992	0.5812
Free Cys	Free Asn	0.3515	0.3193
Free Cys	Free Asp	0.2516	0.4831
Free Cys	HSDH activity with four effectors	-0.1568	0.6654
Free Cys	HSDH activity without effectors	-0.1232	0.7345
<b>Free Cys</b>	<b>LKR-SDHI</b>	<b>0.4417</b>	<b>0.2012</b>
Free Cys	Lys-sensitive AK activity	0.2513	0.4837
<b>Free Cys</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.4067</b>	<b>0.2435</b>
Free Cys	<i>SAMS1</i>	-0.0020	0.9955
<b>Free Cys</b>	<b>SAMS2</b>	<b>0.4618</b>	<b>0.1791</b>
Free Cys	<i>SAMS3</i>	-0.0225	0.9508
Free Cys	<i>SAMS4</i>	-0.1069	0.7688
Free Cys	<i>SAMSs</i>	-0.0256	0.9439
Free Cys	<i>TD1</i>	0.2602	0.4678
Free Cys	<i>TD1/BCAT1</i>	0.1922	0.5948
Free Cys	<i>THA1</i>	-0.0341	0.9255
Free Cys	<i>THA2</i>	0.2951	0.4077
Free Cys	<i>THAs</i>	0.3639	0.3012
Free Cys	<i>THAs+TD1</i>	0.3193	0.3685
<b>Free Cys</b>	<b>Thr-sensitive AK activity</b>	<b>-0.6347</b>	<b>0.0487</b>
Free Cys	<i>TS1</i>	0.1577	0.6635
Free Cys	<i>TS1/(THAs+TD1)</i>	-0.3872	0.2689
<b>Free Cys</b>	<b>TS1/TD1</b>	<b>-0.4332</b>	<b>0.2111</b>
Free Cys	<i>TS1/THAs</i>	0.0679	0.8522
<b>Free Gln</b>	<b>(AK-HSDHs+CGS1)/SAMSs</b>	<b>-0.4206</b>	<b>0.2262</b>
<b>Free Gln</b>	<b>(AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.5623</b>	<b>0.0907</b>
<b>Free Gln</b>	<b>(AK-HSDHs+TS1+TD1)/BCAT1</b>	<b>0.4117</b>	<b>0.2371</b>
Free Gln	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2184	0.5444
Free Gln	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2688	0.4527
Free Gln	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.0384	0.9161
<b>Free Gln</b>	<b>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.6255</b>	<b>0.0531</b>
<b>Free Gln</b>	<b>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</b>	<b>0.4103</b>	<b>0.2389</b>

Free Gln	(AKs+DHDPSs)/LKR-SDHI	-0.0395	0.9136
Free Gln	AK activity with four effectors	-0.1196	0.7422
Free Gln	AK activity without effectors	-0.3365	0.3417
Free Gln	AK activity/HSDH activity with four effectors	-0.1974	0.5847
Free Gln	AK activity/HSDH activity without effectors	-0.1193	0.7426
Free Gln	AK1	0.1688	0.6410
Free Gln	AK1+AK2	-0.0650	0.8585
Free Gln	AK1+AK3	0.3581	0.3096
Free Gln	AK2	-0.0967	0.7904
Free Gln	AK2+AK3	-0.0497	0.8915
Free Gln	AK3	0.2563	0.4748
Free Gln	AK-HSDHI	-0.0563	0.8772
<b>Free Gln</b>	<b>AK-HSDH2</b>	<b>0.6857</b>	<b>0.0286</b>
<b>Free Gln</b>	<b>AK-HSDHs</b>	<b>0.4156</b>	<b>0.2323</b>
<b>Free Gln</b>	<b>AK-HSDHs+CGSI</b>	<b>0.4478</b>	<b>0.1944</b>
<b>Free Gln</b>	<b>AK-HSDHs+TSI</b>	<b>0.4200</b>	<b>0.2269</b>
<b>Free Gln</b>	<b>AK-HSDHs+TSI+TDI</b>	<b>0.4720</b>	<b>0.1685</b>
<b>Free Gln</b>	<b>AK-HSDHs+TSI+THAs</b>	<b>0.4156</b>	<b>0.2323</b>
Free Gln	AKs	-0.0168	0.9634
Free Gln	AKs/AK-HSDHs	-0.2184	0.5444
Free Gln	AKs+AK-HSDHs	0.0934	0.7974
Free Gln	AKs+AK-HSDHs+CGSI	0.1773	0.6241
Free Gln	AKs+AK-HSDHs+DHDPSs	0.1239	0.7330
Free Gln	AKs+AK-HSDHs+TSI	0.2447	0.4957
Free Gln	AKs+AK-HSDHs+TSI+TDI	0.2908	0.4151
Free Gln	AKs+AK-HSDHs+TSI+THAs	0.2405	0.5032
Free Gln	AKs+DHDPSs	0.0160	0.9651
<b>Free Gln</b>	<b>BCATI</b>	<b>-0.8826</b>	<b>0.0007</b>
Free Gln	Biosynthetic genes analyzed	0.3116	0.3807
<b>Free Gln</b>	<b>Catabolic genes analyzed</b>	<b>0.6348</b>	<b>0.0487</b>
Free Gln	CGSI	0.3977	0.2551
<b>Free Gln</b>	<b>CGSI/SAMs</b>	<b>-0.4554</b>	<b>0.1859</b>
Free Gln	CGSI/TSI	-0.0651	0.8583
<b>Free Gln</b>	<b>DHDPS1</b>	<b>0.5292</b>	<b>0.1157</b>
<b>Free Gln</b>	<b>DHDPS2</b>	<b>0.7040</b>	<b>0.0231</b>
<b>Free Gln</b>	<b>DHDPSs</b>	<b>0.8178</b>	<b>0.0038</b>
Free Gln	DHDPSs/AK-HSDHs	-0.1964	0.5865
<b>Free Gln</b>	<b>DHDPSs/LKR-SDHI</b>	<b>0.4811</b>	<b>0.1592</b>
<b>Free Gln</b>	<b>Free Ala</b>	<b>0.8007</b>	<b>0.0054</b>
<b>Free Gln</b>	<b>Free Arg</b>	<b>0.7751</b>	<b>0.0084</b>
<b>Free Gln</b>	<b>Free Asn</b>	<b>0.9756</b>	<b>&lt;.0001</b>
<b>Free Gln</b>	<b>Free Asp</b>	<b>0.8937</b>	<b>0.0005</b>
Free Gln	Free Cys	0.3218	0.3646
Free Gln	HSDH activity with four effectors	0.3454	0.3283
Free Gln	HSDH activity without effectors	0.0226	0.9505
Free Gln	LKR-SDHI	-0.1710	0.6367
<b>Free Gln</b>	<b>Lys-sensitive AK activity</b>	<b>-0.6081</b>	<b>0.0622</b>
Free Gln	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.1315	0.7172
<b>Free Gln</b>	<b>SAMS1</b>	<b>0.8142</b>	<b>0.0041</b>
<b>Free Gln</b>	<b>SAMS2</b>	<b>0.6834</b>	<b>0.0294</b>
Free Gln	SAMS3	0.3135	0.3778
<b>Free Gln</b>	<b>SAMS4</b>	<b>0.6006</b>	<b>0.0663</b>
<b>Free Gln</b>	<b>SAMs</b>	<b>0.6351</b>	<b>0.0485</b>
<b>Free Gln</b>	<b>TDI</b>	<b>0.8474</b>	<b>0.0020</b>
<b>Free Gln</b>	<b>TDI/BCATI</b>	<b>0.4784</b>	<b>0.1619</b>
<b>Free Gln</b>	<b>THA1</b>	<b>-0.4375</b>	<b>0.2061</b>
Free Gln	THA2	-0.0903	0.8040

Free Gln	<i>THAs</i>	-0.1041	0.7748
<b>Free Gln</b>	<b><i>THAs+TDI</i></b>	<b>0.7940</b>	<b>0.0061</b>
Free Gln	Thr-sensitive AK activity	-0.1123	0.7574
Free Gln	<i>TSI</i>	0.3646	0.3003
<b>Free Gln</b>	<b><i>TSI/(THAs+TDI)</i></b>	<b>-0.7398</b>	<b>0.0144</b>
<b>Free Gln</b>	<b><i>TSI/TDI</i></b>	<b>-0.6745</b>	<b>0.0324</b>
<b>Free Gln</b>	<b><i>TSI/THAs</i></b>	<b>0.6663</b>	<b>0.0354</b>
Free Glu	<i>(AK-HSDHs+CGS1)/SAMs</i>	-0.2642	0.4608
<b>Free Glu</b>	<b><i>(AK-HSDHs+TSI)/(THAs+TDI)</i></b>	<b>-0.6643</b>	<b>0.0362</b>
Free Glu	<i>(AK-HSDHs+TSI+TDI)/BCAT1</i>	0.1743	0.6300
Free Glu	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.3404	0.3358
Free Glu	<i>(AKs+AK-HSDHs+CGS1)/SAMs</i>	0.2483	0.4892
Free Glu	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.1521	0.6749
<b>Free Glu</b>	<b><i>(AKs+AK-HSDHs+TSI)/(THAs+TDI)</i></b>	<b>-0.4499</b>	<b>0.1921</b>
Free Glu	<i>(AKs+AK-HSDHs+TSI+TDI)/BCAT1</i>	0.1983	0.5830
Free Glu	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0879	0.8092
Free Glu	AK activity with four effectors	-0.2368	0.5101
<b>Free Glu</b>	<b>AK activity without effectors</b>	<b>-0.4606</b>	<b>0.1803</b>
Free Glu	AK activity/HSDH activity with four effectors	0.0607	0.8676
Free Glu	AK activity/HSDH activity without effectors	0.2534	0.4800
Free Glu	<i>AK1</i>	0.1081	0.7663
Free Glu	<i>AK1+AK2</i>	0.3141	0.3768
<b>Free Glu</b>	<b><i>AK1+AK3</i></b>	<b>0.4427</b>	<b>0.2001</b>
Free Glu	<i>AK2</i>	0.2807	0.4320
Free Glu	<i>AK2+AK3</i>	0.3486	0.3235
<b>Free Glu</b>	<b><i>AK3</i></b>	<b>0.4340</b>	<b>0.2101</b>
<b>Free Glu</b>	<b><i>AK-HSDHI</i></b>	<b>-0.5899</b>	<b>0.0727</b>
Free Glu	<i>AK-HSDH2</i>	0.3542	0.3153
Free Glu	<i>AK-HSDHs</i>	-0.1018	0.7796
Free Glu	<i>AK-HSDHs+CGS1</i>	-0.0887	0.8074
Free Glu	<i>AK-HSDHs+TSI</i>	0.0386	0.9158
Free Glu	<i>AK-HSDHs+TSI+TDI</i>	0.0933	0.7976
Free Glu	<i>AK-HSDHs+TSI+THAs</i>	0.0379	0.9172
Free Glu	<i>AKs</i>	0.3883	0.2675
Free Glu	<i>AKs/AK-HSDHs</i>	0.3404	0.3358
Free Glu	<i>AKs+AK-HSDHs</i>	0.3768	0.2831
Free Glu	<i>AKs+AK-HSDHs+CGS1</i>	0.3431	0.3318
Free Glu	<i>AKs+AK-HSDHs+DHDPSs</i>	0.3964	0.2568
Free Glu	<i>AKs+AK-HSDHs+TSI</i>	0.3398	0.3367
Free Glu	<i>AKs+AK-HSDHs+TSI+TDI</i>	0.3671	0.2967
Free Glu	<i>AKs+AK-HSDHs+TSI+THAs</i>	0.3373	0.3405
<b>Free Glu</b>	<b><i>AKs+DHDPSs</i></b>	<b>0.4103</b>	<b>0.2390</b>
<b>Free Glu</b>	<b><i>BCAT1</i></b>	<b>-0.8139</b>	<b>0.0042</b>
Free Glu	Biosynthetic genes analyzed	0.3147	0.3758
Free Glu	Catabolic genes analyzed	0.0797	0.8268
Free Glu	<i>CGS1</i>	-0.0509	0.8890
Free Glu	<i>CGS1/SAMs</i>	-0.0982	0.7872
Free Glu	<i>CGS1/TSI</i>	-0.0270	0.9409
<b>Free Glu</b>	<b><i>DHDPS1</i></b>	<b>0.5393</b>	<b>0.1077</b>
Free Glu	<i>DHDPS2</i>	0.3709	0.2914
<b>Free Glu</b>	<b><i>DHDPSs</i></b>	<b>0.5956</b>	<b>0.0693</b>
Free Glu	<i>DHDPSs/AK-HSDHs</i>	0.3408	0.3352
Free Glu	<i>DHDPSs/LKR-SDHI</i>	-0.0598	0.8697
<b>Free Glu</b>	<b>Free Ala</b>	<b>0.5743</b>	<b>0.0825</b>
<b>Free Glu</b>	<b>Free Arg</b>	<b>0.4827</b>	<b>0.1576</b>
<b>Free Glu</b>	<b>Free Asn</b>	<b>0.7998</b>	<b>0.0055</b>
<b>Free Glu</b>	<b>Free Asp</b>	<b>0.8574</b>	<b>0.0015</b>

<b>Free Glu</b>	<b>Free Cys</b>	<b>0.4341</b>	<b>0.2101</b>
<b>Free Glu</b>	<b>Free Gln</b>	<b>0.7514</b>	<b>0.0122</b>
Free Glu	HSDH activity with four effectors	-0.1970	0.5854
<b>Free Glu</b>	<b>HSDH activity without effectors</b>	<b>-0.5413</b>	<b>0.1061</b>
Free Glu	<i>LKR-SDHI</i>	0.3130	0.3785
<b>Free Glu</b>	<b>Lys-sensitive AK activity</b>	<b>-0.4008</b>	<b>0.2511</b>
Free Glu	Lys-sensitive AK activity/Thr-sensitive AK activity	0.0786	0.8290
<b>Free Glu</b>	<b>SAMS1</b>	<b>0.6090</b>	<b>0.0617</b>
<b>Free Glu</b>	<b>SAMS2</b>	<b>0.6086</b>	<b>0.0619</b>
Free Glu	<i>SAMS3</i>	-0.2311	0.5207
Free Glu	<i>SAMS4</i>	0.0983	0.7870
Free Glu	<i>SAMSs</i>	0.0792	0.8278
<b>Free Glu</b>	<b>TD1</b>	<b>0.5868</b>	<b>0.0745</b>
Free Glu	<i>TD1/BCAT1</i>	0.2191	0.5431
Free Glu	<i>THA1</i>	-0.0661	0.8560
Free Glu	<i>THA2</i>	-0.0390	0.9148
Free Glu	<i>THAs</i>	0.0537	0.8828
<b>Free Glu</b>	<b>THAs+TD1</b>	<b>0.5636</b>	<b>0.0898</b>
Free Glu	Thr-sensitive AK activity	-0.2900	0.4163
Free Glu	<i>TS1</i>	0.0953	0.7935
<b>Free Glu</b>	<b>TS1/(THAs+TD1)</b>	<b>-0.7362</b>	<b>0.0152</b>
<b>Free Glu</b>	<b>TS1/TD1</b>	<b>-0.6703</b>	<b>0.0339</b>
Free Glu	<i>TS1/THAs</i>	0.1931	0.5929
<b>Free Gly</b>	<b>(AK-HSDHs+CGS1)/SAMSs</b>	<b>-0.7265</b>	<b>0.0173</b>
<b>Free Gly</b>	<b>(AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.4886</b>	<b>0.1518</b>
Free Gly	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.2050	0.5699
Free Gly	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.3615	0.3047
<b>Free Gly</b>	<b>(AKs+AK-HSDHs+CGS1)/SAMSs</b>	<b>-0.4799</b>	<b>0.1604</b>
Free Gly	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.1097	0.7628
<b>Free Gly</b>	<b>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.6445</b>	<b>0.0443</b>
Free Gly	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.1955	0.5884
Free Gly	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.2200	0.5414
Free Gly	AK activity with four effectors	-0.3238	0.3614
<b>Free Gly</b>	<b>AK activity without effectors</b>	<b>-0.5067</b>	<b>0.1350</b>
Free Gly	AK activity/HSDH activity with four effectors	-0.2689	0.4526
Free Gly	AK activity/HSDH activity without effectors	-0.2646	0.4600
Free Gly	<i>AK1</i>	0.3346	0.3446
Free Gly	<i>AK1+AK2</i>	-0.2611	0.4663
<b>Free Gly</b>	<b>AK1+AK3</b>	<b>0.4176</b>	<b>0.2298</b>
Free Gly	<i>AK2</i>	-0.3205	0.3667
Free Gly	<i>AK2+AK3</i>	-0.2872	0.4210
Free Gly	<i>AK3</i>	0.1376	0.7046
Free Gly	<i>AK-HSDH1</i>	0.0515	0.8877
<b>Free Gly</b>	<b>AK-HSDH2</b>	<b>0.5610</b>	<b>0.0916</b>
Free Gly	<i>AK-HSDHs</i>	0.3939	0.2601
Free Gly	<i>AK-HSDHs+CGS1</i>	0.2909	0.4148
Free Gly	<i>AK-HSDHs+TS1</i>	0.2959	0.4065
Free Gly	<i>AK-HSDHs+TS1+TD1</i>	0.3458	0.3278
Free Gly	<i>AK-HSDHs+TS1+THAs</i>	0.2850	0.4247
Free Gly	<i>AKs</i>	-0.2310	0.5207
Free Gly	<i>AKs/AK-HSDHs</i>	-0.3615	0.3047
Free Gly	<i>AKs+AK-HSDHs</i>	-0.1346	0.7109
Free Gly	<i>AKs+AK-HSDHs+CGS1</i>	-0.1002	0.7829
Free Gly	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.1041	0.7748
Free Gly	<i>AKs+AK-HSDHs+TS1</i>	-0.0064	0.9861
Free Gly	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.0408	0.9108
Free Gly	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.0131	0.9714

Free Gly	<i>AKs+DHDPSs</i>	-0.1999	0.5797
<b>Free Gly</b>	<b><i>BCAT1</i></b>	<b>-0.6924</b>	<b>0.0265</b>
Free Gly	Biosynthetic genes analyzed	0.0370	0.9192
<b>Free Gly</b>	<b>Catabolic genes analyzed</b>	<b>0.6752</b>	<b>0.0322</b>
Free Gly	<i>CGS1</i>	0.1270	0.7266
<b>Free Gly</b>	<b><i>CGS1/SAMSs</i></b>	<b>-0.7067</b>	<b>0.0223</b>
Free Gly	<i>CGS1/TS1</i>	-0.1642	0.6503
<b>Free Gly</b>	<b><i>DHDPS1</i></b>	<b>0.5081</b>	<b>0.1338</b>
<b>Free Gly</b>	<b><i>DHDPS2</i></b>	<b>0.6119</b>	<b>0.0601</b>
<b>Free Gly</b>	<b><i>DHDPSs</i></b>	<b>0.7527</b>	<b>0.0120</b>
Free Gly	<i>DHDPSs/AK-HSDHs</i>	-0.2478	0.4900
<b>Free Gly</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>0.4608</b>	<b>0.1801</b>
<b>Free Gly</b>	<b>Free Ala</b>	<b>0.7150</b>	<b>0.0201</b>
<b>Free Gly</b>	<b>Free Arg</b>	<b>0.4472</b>	<b>0.1950</b>
<b>Free Gly</b>	<b>Free Asn</b>	<b>0.7900</b>	<b>0.0065</b>
<b>Free Gly</b>	<b>Free Asp</b>	<b>0.8533</b>	<b>0.0017</b>
Free Gly	Free Cys	0.3174	0.3715
<b>Free Gly</b>	<b>Free Gln</b>	<b>0.8765</b>	<b>0.0009</b>
<b>Free Gly</b>	<b>Free Glu</b>	<b>0.5999</b>	<b>0.0668</b>
Free Gly	HSDH activity with four effectors	0.1605	0.6578
Free Gly	HSDH activity without effectors	-0.0211	0.9539
Free Gly	<i>LKR-SDHI</i>	-0.1470	0.6854
<b>Free Gly</b>	<b>Lys-sensitive AK activity</b>	<b>-0.7021</b>	<b>0.0236</b>
<b>Free Gly</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.4314</b>	<b>0.2132</b>
<b>Free Gly</b>	<b><i>SAMS1</i></b>	<b>0.7551</b>	<b>0.0116</b>
<b>Free Gly</b>	<b><i>SAMS2</i></b>	<b>0.5401</b>	<b>0.1070</b>
<b>Free Gly</b>	<b><i>SAMS3</i></b>	<b>0.4093</b>	<b>0.2402</b>
<b>Free Gly</b>	<b><i>SAMS4</i></b>	<b>0.5815</b>	<b>0.0779</b>
<b>Free Gly</b>	<b><i>SAMSs</i></b>	<b>0.6761</b>	<b>0.0318</b>
<b>Free Gly</b>	<b><i>TD1</i></b>	<b>0.7438</b>	<b>0.0137</b>
Free Gly	<i>TD1/BCAT1</i>	0.2771	0.4383
Free Gly	<i>THA1</i>	-0.2419	0.5008
<b>Free Gly</b>	<b><i>THA2</i></b>	<b>-0.4364</b>	<b>0.2073</b>
<b>Free Gly</b>	<b><i>THAs</i></b>	<b>-0.4451</b>	<b>0.1974</b>
<b>Free Gly</b>	<b><i>THAs+TD1</i></b>	<b>0.6286</b>	<b>0.0516</b>
Free Gly	Thr-sensitive AK activity	0.0299	0.9347
Free Gly	<i>TS1</i>	0.2114	0.5577
<b>Free Gly</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.6417</b>	<b>0.0455</b>
<b>Free Gly</b>	<b><i>TS1/TD1</i></b>	<b>-0.6234</b>	<b>0.0541</b>
<b>Free Gly</b>	<b><i>TS1/THAs</i></b>	<b>0.8185</b>	<b>0.0038</b>
Free Gly/Thr	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.3532	0.3168
Free Gly/Thr	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0308	0.9328
Free Gly/Thr	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0072	0.9843
<b>Free Gly/Thr</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>-0.7058</b>	<b>0.0226</b>
<b>Free Gly/Thr</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>-0.7629</b>	<b>0.0103</b>
Free Gly/Thr	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.2316	0.5196
Free Gly/Thr	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.3982	0.2544
Free Gly/Thr	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0356	0.9222
<b>Free Gly/Thr</b>	<b><i>(AKs+DHDPSs)/LKR-SDHI</i></b>	<b>-0.4194</b>	<b>0.2276</b>
<b>Free Gly/Thr</b>	<b>AK activity with four effectors</b>	<b>-0.6729</b>	<b>0.0330</b>
<b>Free Gly/Thr</b>	<b>AK activity without effectors</b>	<b>-0.7418</b>	<b>0.0140</b>
<b>Free Gly/Thr</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>-0.7331</b>	<b>0.0158</b>
<b>Free Gly/Thr</b>	<b>AK activity/HSDH activity without effectors</b>	<b>-0.6863</b>	<b>0.0284</b>
Free Gly/Thr	<i>AK1</i>	0.2119	0.5566
<b>Free Gly/Thr</b>	<b><i>AK1+AK2</i></b>	<b>-0.8276</b>	<b>0.0031</b>
Free Gly/Thr	<i>AK1+AK3</i>	0.2616	0.4653
<b>Free Gly/Thr</b>	<b><i>AK2</i></b>	<b>-0.8419</b>	<b>0.0023</b>
<b>Free Gly/Thr</b>	<b><i>AK2+AK3</i></b>	<b>-0.8019</b>	<b>0.0053</b>



Free Gly/Thr	AK3	0.0968	0.7903
Free Gly/Thr	AK-HSDH1	0.2744	0.4429
Free Gly/Thr	AK-HSDH2	0.3493	0.3225
Free Gly/Thr	AK-HSDHs	0.3809	0.2775
Free Gly/Thr	AK-HSDHs+CGSI	0.2010	0.5777
Free Gly/Thr	AK-HSDHs+TS1	0.1014	0.7805
Free Gly/Thr	AK-HSDHs+TS1+TD1	0.1135	0.7548
Free Gly/Thr	AK-HSDHs+TS1+THAs	0.0864	0.8124
<b>Free Gly/Thr</b>	<b>AKs</b>	<b>-0.7958</b>	<b>0.0059</b>
<b>Free Gly/Thr</b>	<b>AKs/AK-HSDHs</b>	<b>-0.7058</b>	<b>0.0226</b>
<b>Free Gly/Thr</b>	<b>AKs+AK-HSDHs</b>	<b>-0.7261</b>	<b>0.0174</b>
<b>Free Gly/Thr</b>	<b>AKs+AK-HSDHs+CGSI</b>	<b>-0.6942</b>	<b>0.0259</b>
<b>Free Gly/Thr</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>-0.7117</b>	<b>0.0210</b>
<b>Free Gly/Thr</b>	<b>AKs+AK-HSDHs+TS1</b>	<b>-0.5862</b>	<b>0.0749</b>
<b>Free Gly/Thr</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>-0.5556</b>	<b>0.0954</b>
<b>Free Gly/Thr</b>	<b>AKs+AK-HSDHs+TS1+THAs</b>	<b>-0.5940</b>	<b>0.0702</b>
<b>Free Gly/Thr</b>	<b>AKs+DHDPSs</b>	<b>-0.7846</b>	<b>0.0072</b>
Free Gly/Thr	BCAT1	-0.2206	0.5403
<b>Free Gly/Thr</b>	<b>Biosynthetic genes analyzed</b>	<b>-0.5292</b>	<b>0.1158</b>
Free Gly/Thr	Catabolic genes analyzed	0.3690	0.2940
Free Gly/Thr	CGSI	-0.0345	0.9247
<b>Free Gly/Thr</b>	<b>CGSI/SAMs</b>	<b>-0.4670</b>	<b>0.1736</b>
Free Gly/Thr	CGSI/TS1	-0.0912	0.8022
Free Gly/Thr	DHDPS1	0.0088	0.9808
Free Gly/Thr	DHDPS2	0.2771	0.4382
Free Gly/Thr	DHDPSs	0.2007	0.5782
Free Gly/Thr	DHDPSs/AK-HSDHs	-0.3526	0.3177
Free Gly/Thr	DHDPSs/LKR-SDH1	0.3814	0.2768
<b>Free Gly/Thr</b>	<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>-0.7905</b>	<b>0.0065</b>
<b>Free Gly/Thr</b>	<b>Free Ala</b>	<b>0.4202</b>	<b>0.2266</b>
Free Gly/Thr	Free Arg	0.0941	0.7960
Free Gly/Thr	Free Asn	0.2403	0.5037
<b>Free Gly/Thr</b>	<b>Free Asn+Asp</b>	<b>0.4479</b>	<b>0.1942</b>
<b>Free Gly/Thr</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>-0.4754</b>	<b>0.1650</b>
<b>Free Gly/Thr</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>-0.4776</b>	<b>0.1627</b>
<b>Free Gly/Thr</b>	<b>Free Asp</b>	<b>0.4700</b>	<b>0.1705</b>
<b>Free Gly/Thr</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>-0.5045</b>	<b>0.1370</b>
<b>Free Gly/Thr</b>	<b>Free Cys</b>	<b>-0.5244</b>	<b>0.1197</b>
Free Gly/Thr	Free Gln	0.3223	0.3638
Free Gly/Thr	Free Glu	0.0866	0.8121
<b>Free Gly/Thr</b>	<b>Free Gly</b>	<b>0.5125</b>	<b>0.1299</b>
<b>Free Gly/Thr</b>	<b>Free Gly+Ile</b>	<b>0.4870</b>	<b>0.1535</b>
Free Gly/Thr	Free His	0.1259	0.7289
Free Gly/Thr	Free Ile	-0.3205	0.3666
Free Gly/Thr	Free Leu	0.2809	0.4318
Free Gly/Thr	Free Lys	0.1055	0.7718
<b>Free Gly/Thr</b>	<b>Free Lys/(Met+Thr+Ile)</b>	<b>0.9141</b>	<b>0.0002</b>
<b>Free Gly/Thr</b>	<b>Free Lys/Thr</b>	<b>0.9152</b>	<b>0.0002</b>
<b>Free Gly/Thr</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>-0.7364</b>	<b>0.0151</b>
Free Gly/Thr	Free Met	0.2928	0.4116
<b>Free Gly/Thr</b>	<b>Free Met/Thr</b>	<b>0.9346</b>	<b>&lt;.0001</b>
<b>Free Gly/Thr</b>	<b>Free Met+Thr+Ile</b>	<b>-0.7393</b>	<b>0.0146</b>
Free Gly/Thr	Free Phe	0.3723	0.2893
Free Gly/Thr	Free Pro	0.3363	0.3420
<b>Free Gly/Thr</b>	<b>Free Ser</b>	<b>0.7755</b>	<b>0.0084</b>
<b>Free Gly/Thr</b>	<b>Free Thr</b>	<b>-0.7404</b>	<b>0.0143</b>
<b>Free Gly/Thr</b>	<b>Free Trp</b>	<b>0.4798</b>	<b>0.1605</b>
Free Gly/Thr	Free Tyr	0.1974	0.5846

Free Gly/Thr	Free Val	0.3064	0.3893
Free Gly/Thr	HSDH activity with four effectors	0.1465	0.6864
Free Gly/Thr	HSDH activity without effectors	0.1149	0.7520
Free Gly/Thr	<i>LKR-SDHI</i>	-0.2670	0.4558
<b>Free Gly/Thr</b>	<b>Lys-sensitive AK activity</b>	<b>-0.8594</b>	<b>0.0014</b>
<b>Free Gly/Thr</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.7034</b>	<b>0.0232</b>
<b>Free Gly/Thr</b>	<b><i>SAMS1</i></b>	<b>0.4803</b>	<b>0.1600</b>
Free Gly/Thr	<i>SAMS2</i>	0.0206	0.9551
Free Gly/Thr	<i>SAMS3</i>	0.1998	0.5800
Free Gly/Thr	<i>SAMS4</i>	0.3345	0.3448
Free Gly/Thr	<i>SAMSs</i>	0.3725	0.2892
Free Gly/Thr	<i>TD1</i>	0.2208	0.5399
Free Gly/Thr	<i>TD1/BCAT1</i>	0.0273	0.9404
Free Gly/Thr	<i>THA1</i>	0.1042	0.7744
<b>Free Gly/Thr</b>	<b><i>THA2</i></b>	<b>-0.7494</b>	<b>0.0126</b>
<b>Free Gly/Thr</b>	<b><i>THAs</i></b>	<b>-0.7760</b>	<b>0.0083</b>
Free Gly/Thr	<i>THAs+TD1</i>	0.0656	0.8572
<b>Free Gly/Thr</b>	<b>Thr-sensitive AK activity</b>	<b>0.5567</b>	<b>0.0946</b>
Free Gly/Thr	Total free AAs	0.1640	0.6508
Free Gly/Thr	<i>TS1</i>	-0.0356	0.9221
Free Gly/Thr	<i>TS1/(THAs+TD1)</i>	-0.0286	0.9376
Free Gly/Thr	<i>TS1/TD1</i>	-0.0588	0.8718
<b>Free Gly/Thr</b>	<b><i>TS1/THAs</i></b>	<b>0.5799</b>	<b>0.0789</b>
<b>Free Gly+Ile</b>	<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>-0.7116</b>	<b>0.0210</b>
<b>Free Gly+Ile</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.5127</b>	<b>0.1297</b>
Free Gly+Ile	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.2278	0.5267
Free Gly+Ile	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.3526	0.3177
<b>Free Gly+Ile</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>-0.4684</b>	<b>0.1721</b>
Free Gly+Ile	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.1202	0.7409
<b>Free Gly+Ile</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.6686</b>	<b>0.0345</b>
Free Gly+Ile	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.2179	0.5453
Free Gly+Ile	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.2297	0.5231
Free Gly+Ile	AK activity with four effectors	-0.3124	0.3795
<b>Free Gly+Ile</b>	<b>AK activity without effectors</b>	<b>-0.4828</b>	<b>0.1576</b>
Free Gly+Ile	AK activity/HSDH activity with four effectors	-0.2749	0.4421
Free Gly+Ile	AK activity/HSDH activity without effectors	-0.2715	0.4479
Free Gly+Ile	<i>AK1</i>	0.3054	0.3909
Free Gly+Ile	<i>AK1+AK2</i>	-0.2502	0.4857
Free Gly+Ile	<i>AK1+AK3</i>	0.3903	0.2649
Free Gly+Ile	<i>AK2</i>	-0.3039	0.3933
Free Gly+Ile	<i>AK2+AK3</i>	-0.2714	0.4482
Free Gly+Ile	<i>AK3</i>	0.1367	0.7066
Free Gly+Ile	<i>AK-HSDH1</i>	0.0588	0.8719
<b>Free Gly+Ile</b>	<b><i>AK-HSDH2</i></b>	<b>0.5540</b>	<b>0.0966</b>
Free Gly+Ile	<i>AK-HSDHs</i>	0.3936	0.2604
Free Gly+Ile	<i>AK-HSDHs+CGS1</i>	0.3059	0.3900
Free Gly+Ile	<i>AK-HSDHs+TS1</i>	0.3269	0.3566
Free Gly+Ile	<i>AK-HSDHs+TS1+TD1</i>	0.3776	0.2820
Free Gly+Ile	<i>AK-HSDHs+TS1+THAs</i>	0.3170	0.3721
Free Gly+Ile	<i>AKs</i>	-0.2205	0.5404
Free Gly+Ile	<i>AKs/AK-HSDHs</i>	-0.3526	0.3177
Free Gly+Ile	<i>AKs+AK-HSDHs</i>	-0.1237	0.7334
Free Gly+Ile	<i>AKs+AK-HSDHs+CGS1</i>	-0.0835	0.8187
Free Gly+Ile	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0923	0.7998
Free Gly+Ile	<i>AKs+AK-HSDHs+TS1</i>	0.0213	0.9533
Free Gly+Ile	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.0696	0.8485
Free Gly+Ile	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.0150	0.9671

Free Gly+Ile	<i>AKs+DHDPSs</i>	-0.1884	0.6022
<b>Free Gly+Ile</b>	<b><i>BCAT1</i></b>	<b>-0.7148</b>	<b>0.0202</b>
Free Gly+Ile	Biosynthetic genes analyzed	0.0676	0.8528
<b>Free Gly+Ile</b>	<b>Catabolic genes analyzed</b>	<b>0.6792</b>	<b>0.0308</b>
Free Gly+Ile	<i>CGS1</i>	0.1554	0.6682
<b>Free Gly+Ile</b>	<b><i>CGS1/SAMSs</i></b>	<b>-0.6886</b>	<b>0.0277</b>
Free Gly+Ile	<i>CGS1/TS1</i>	-0.1870	0.6049
<b>Free Gly+Ile</b>	<b><i>DHDPS1</i></b>	<b>0.5452</b>	<b>0.1031</b>
<b>Free Gly+Ile</b>	<b><i>DHDPS2</i></b>	<b>0.6217</b>	<b>0.0550</b>
<b>Free Gly+Ile</b>	<b><i>DHDPSs</i></b>	<b>0.7805</b>	<b>0.0077</b>
Free Gly+Ile	<i>DHDPSs/AK-HSDHs</i>	-0.2377	0.5084
<b>Free Gly+Ile</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>0.4602</b>	<b>0.1808</b>
<b>Free Gly+Ile</b>	<b>Free Ala</b>	<b>0.7387</b>	<b>0.0147</b>
<b>Free Gly+Ile</b>	<b>Free Arg</b>	<b>0.4739</b>	<b>0.1664</b>
<b>Free Gly+Ile</b>	<b>Free Asn</b>	<b>0.8100</b>	<b>0.0045</b>
<b>Free Gly+Ile</b>	<b>Free Asn+Asp</b>	<b>0.8618</b>	<b>0.0013</b>
Free Gly+Ile	Free Asn+Asp+Lys+Met+Thr+Ile	0.3353	0.3436
Free Gly+Ile	Free Asn+Asp+Lys+Thr+Ile	0.3309	0.3504
<b>Free Gly+Ile</b>	<b>Free Asp</b>	<b>0.8573</b>	<b>0.0015</b>
Free Gly+Ile	Free Asp+Lys+Met+Thr+Ile	0.2901	0.4161
Free Gly+Ile	Free Cys	0.3415	0.3342
<b>Free Gly+Ile</b>	<b>Free Gln</b>	<b>0.8897</b>	<b>0.0006</b>
<b>Free Gly+Ile</b>	<b>Free Glu</b>	<b>0.6028</b>	<b>0.0651</b>
<b>Free Gly+Ile</b>	<b>Free Gly</b>	<b>0.9980</b>	<b>&lt;.0001</b>
<b>Free Gly+Ile</b>	<b>Free His</b>	<b>0.6548</b>	<b>0.0399</b>
Free Gly+Ile	Free Ile	0.1935	0.5922
<b>Free Gly+Ile</b>	<b>Free Leu</b>	<b>0.6686</b>	<b>0.0345</b>
<b>Free Gly+Ile</b>	<b>Free Lys</b>	<b>0.5787</b>	<b>0.0796</b>
Free Gly+Ile	Free Lys+Met+Thr+Ile	-0.0616	0.8658
<b>Free Gly+Ile</b>	<b>Free Met</b>	<b>0.5104</b>	<b>0.1317</b>
Free Gly+Ile	Free Met+Thr+Ile	-0.0827	0.8203
<b>Free Gly+Ile</b>	<b>Free Phe</b>	<b>0.6493</b>	<b>0.0422</b>
<b>Free Gly+Ile</b>	<b>Free Pro</b>	<b>0.8576</b>	<b>0.0015</b>
<b>Free Gly+Ile</b>	<b>Free Ser</b>	<b>0.8458</b>	<b>0.0020</b>
Free Gly+Ile	Free Thr	-0.0947	0.7947
<b>Free Gly+Ile</b>	<b>Free Trp</b>	<b>0.7365</b>	<b>0.0151</b>
Free Gly+Ile	Free Tyr	0.3287	0.3537
<b>Free Gly+Ile</b>	<b>Free Val</b>	<b>0.4352</b>	<b>0.2088</b>
Free Gly+Ile	HSDH activity with four effectors	0.1839	0.6111
Free Gly+Ile	HSDH activity without effectors	0.0054	0.9883
Free Gly+Ile	<i>LKR-SDHI</i>	-0.1293	0.7219
<b>Free Gly+Ile</b>	<b>Lys-sensitive AK activity</b>	<b>-0.6938</b>	<b>0.0261</b>
<b>Free Gly+Ile</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.4033</b>	<b>0.2478</b>
<b>Free Gly+Ile</b>	<b><i>SAMS1</i></b>	<b>0.7718</b>	<b>0.0089</b>
<b>Free Gly+Ile</b>	<b><i>SAMS2</i></b>	<b>0.5842</b>	<b>0.0761</b>
<b>Free Gly+Ile</b>	<b><i>SAMS3</i></b>	<b>0.4018</b>	<b>0.2497</b>
<b>Free Gly+Ile</b>	<b><i>SAMS4</i></b>	<b>0.5933</b>	<b>0.0706</b>
<b>Free Gly+Ile</b>	<b><i>SAMSs</i></b>	<b>0.6798</b>	<b>0.0306</b>
<b>Free Gly+Ile</b>	<b><i>TD1</i></b>	<b>0.7736</b>	<b>0.0087</b>
Free Gly+Ile	<i>TD1/BCAT1</i>	0.3002	0.3993
Free Gly+Ile	<i>THA1</i>	-0.2444	0.4962
Free Gly+Ile	<i>THA2</i>	-0.3859	0.2708
Free Gly+Ile	<i>THAs</i>	-0.3963	0.2569
<b>Free Gly+Ile</b>	<b><i>THAs+TD1</i></b>	<b>0.6677</b>	<b>0.0349</b>
Free Gly+Ile	Thr-sensitive AK activity	0.0179	0.9609
<b>Free Gly+Ile</b>	<b>Total free AAs</b>	<b>0.8315</b>	<b>0.0029</b>
Free Gly+Ile	<i>TS1</i>	0.2521	0.4823
<b>Free Gly+Ile</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.6628</b>	<b>0.0367</b>

<b>Free Gly+Ile</b>	<i>TS1/TD1</i>	<b>-0.6511</b>	<b>0.0414</b>
<b>Free Gly+Ile</b>	<i>TS1/THAs</i>	<b>0.8191</b>	<b>0.0037</b>
Free His	<i>(AK-HSDHs+CGS1)/SAMs</i>	-0.1397	0.7004
<b>Free His</b>	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>-0.4517</b>	<b>0.1901</b>
<b>Free His</b>	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<b>0.5579</b>	<b>0.0938</b>
Free His	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2134	0.5538
Free His	<i>(AKs+AK-HSDHs+CGS1)/SAMs</i>	-0.1556	0.6678
Free His	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.2359	0.5117
<b>Free His</b>	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>-0.5033</b>	<b>0.1381</b>
<b>Free His</b>	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	<b>0.5572</b>	<b>0.0942</b>
Free His	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.1697	0.6392
Free His	AK activity with four effectors	0.1560	0.6670
Free His	AK activity without effectors	-0.0229	0.9500
Free His	AK activity/HSDH activity with four effectors	-0.0943	0.7955
Free His	AK activity/HSDH activity without effectors	-0.0193	0.9578
Free His	<i>AK1</i>	-0.0628	0.8632
Free His	<i>AK1+AK2</i>	0.0644	0.8597
Free His	<i>AK1+AK3</i>	0.1427	0.6941
Free His	<i>AK2</i>	0.0759	0.8348
Free His	<i>AK2+AK3</i>	0.1171	0.7473
Free His	<i>AK3</i>	0.2528	0.4810
Free His	<i>AK-HSDH1</i>	0.0527	0.8850
<b>Free His</b>	<i>AK-HSDH2</i>	<b>0.7304</b>	<b>0.0164</b>
<b>Free His</b>	<i>AK-HSDHs</i>	<b>0.5073</b>	<b>0.1345</b>
<b>Free His</b>	<i>AK-HSDHs+CGS1</i>	<b>0.6513</b>	<b>0.0414</b>
<b>Free His</b>	<i>AK-HSDHs+TS1</i>	<b>0.6484</b>	<b>0.0426</b>
<b>Free His</b>	<i>AK-HSDHs+TS1+TD1</i>	<b>0.6873</b>	<b>0.0281</b>
<b>Free His</b>	<i>AK-HSDHs+TS1+THAs</i>	<b>0.6498</b>	<b>0.0420</b>
Free His	<i>AKs</i>	0.1094	0.7636
Free His	<i>AKs/AK-HSDHs</i>	-0.2134	0.5538
Free His	<i>AKs+AK-HSDHs</i>	0.2479	0.4897
Free His	<i>AKs+AK-HSDHs+CGS1</i>	0.3889	0.2667
Free His	<i>AKs+AK-HSDHs+DHDPSs</i>	0.2773	0.4379
<b>Free His</b>	<i>AKs+AK-HSDHs+TS1</i>	<b>0.4883</b>	<b>0.1522</b>
<b>Free His</b>	<i>AKs+AK-HSDHs+TS1+TD1</i>	<b>0.5285</b>	<b>0.1163</b>
<b>Free His</b>	<i>AKs+AK-HSDHs+TS1+THAs</i>	<b>0.4864</b>	<b>0.1540</b>
Free His	<i>AKs+DHDPSs</i>	0.1420	0.6955
<b>Free His</b>	<i>BCAT1</i>	<b>-0.8164</b>	<b>0.0040</b>
<b>Free His</b>	<b>Biosynthetic genes analyzed</b>	<b>0.5805</b>	<b>0.0785</b>
<b>Free His</b>	<b>Catabolic genes analyzed</b>	<b>0.6273</b>	<b>0.0522</b>
<b>Free His</b>	<i>CGS1</i>	<b>0.6811</b>	<b>0.0301</b>
Free His	<i>CGS1/SAMs</i>	-0.2778	0.4371
Free His	<i>CGS1/TS1</i>	-0.1202	0.7408
<b>Free His</b>	<i>DHDPS1</i>	<b>0.4596</b>	<b>0.1814</b>
<b>Free His</b>	<i>DHDPS2</i>	<b>0.7993</b>	<b>0.0055</b>
<b>Free His</b>	<i>DHDPSs</i>	<b>0.8274</b>	<b>0.0031</b>
Free His	<i>DHDPSs/AK-HSDHs</i>	-0.2745	0.4427
<b>Free His</b>	<i>DHDPSs/LKR-SDHI</i>	<b>0.5692</b>	<b>0.0859</b>
<b>Free His</b>	<b>Free Ala</b>	<b>0.7851</b>	<b>0.0071</b>
<b>Free His</b>	<b>Free Arg</b>	<b>0.9024</b>	<b>0.0004</b>
<b>Free His</b>	<b>Free Asn</b>	<b>0.9428</b>	<b>&lt;.0001</b>
<b>Free His</b>	<b>Free Asp</b>	<b>0.7028</b>	<b>0.0234</b>
Free His	Free Cys	0.2384	0.5072
<b>Free His</b>	<b>Free Gln</b>	<b>0.9028</b>	<b>0.0003</b>
<b>Free His</b>	<b>Free Glu</b>	<b>0.6327</b>	<b>0.0496</b>
<b>Free His</b>	<b>Free Gly</b>	<b>0.6264</b>	<b>0.0527</b>
<b>Free His</b>	<b>HSDH activity with four effectors</b>	<b>0.5334</b>	<b>0.1123</b>
Free His	HSDH activity without effectors	0.1896	0.5998

Free His	<i>LKR-SDHI</i>	-0.2605	0.4673
Free His	Lys-sensitive AK activity	-0.3732	0.2882
Free His	Lys-sensitive AK activity/Thr-sensitive AK activity	0.0112	0.9755
<b>Free His</b>	<b><i>SAMS1</i></b>	<b>0.7288</b>	<b>0.0168</b>
<b>Free His</b>	<b><i>SAMS2</i></b>	<b>0.7343</b>	<b>0.0156</b>
Free His	<i>SAMS3</i>	0.3219	0.3644
<b>Free His</b>	<b><i>SAMS4</i></b>	<b>0.6731</b>	<b>0.0329</b>
<b>Free His</b>	<b><i>SAMSs</i></b>	<b>0.6262</b>	<b>0.0528</b>
<b>Free His</b>	<b><i>TD1</i></b>	<b>0.8736</b>	<b>0.0010</b>
<b>Free His</b>	<b><i>TD1/BCAT1</i></b>	<b>0.6083</b>	<b>0.0621</b>
<b>Free His</b>	<b><i>THA1</i></b>	<b>-0.5628</b>	<b>0.0903</b>
Free His	<i>THA2</i>	0.2188	0.5436
Free His	<i>THAs</i>	0.1892	0.6007
<b>Free His</b>	<b><i>THAs+TD1</i></b>	<b>0.8787</b>	<b>0.0008</b>
Free His	Thr-sensitive AK activity	-0.0181	0.9604
<b>Free His</b>	<b><i>TS1</i></b>	<b>0.6239</b>	<b>0.0539</b>
<b>Free His</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.6163</b>	<b>0.0577</b>
<b>Free His</b>	<b><i>TS1/TD1</i></b>	<b>-0.5855</b>	<b>0.0753</b>
<b>Free His</b>	<b><i>TS1/THAs</i></b>	<b>0.5304</b>	<b>0.1147</b>
Free Ile	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.1184	0.7446
<b>Free Ile</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.4602</b>	<b>0.1807</b>
Free Ile	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.3940	0.2599
Free Ile	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.0821	0.8215
Free Ile	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.1035	0.7760
Free Ile	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.1826	0.6137
<b>Free Ile</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.4865</b>	<b>0.1539</b>
Free Ile	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.3871	0.2691
Free Ile	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.1902	0.5987
Free Ile	AK activity with four effectors	0.1271	0.7263
Free Ile	AK activity without effectors	0.2958	0.4066
Free Ile	AK activity/HSDH activity with four effectors	-0.1388	0.7021
Free Ile	AK activity/HSDH activity without effectors	-0.1527	0.6736
<b>Free Ile</b>	<b><i>AK1</i></b>	<b>-0.4080</b>	<b>0.2418</b>
Free Ile	<i>AK1+AK2</i>	0.1297	0.7209
Free Ile	<i>AK1+AK3</i>	-0.3643	0.3007
Free Ile	<i>AK2</i>	0.2096	0.5611
Free Ile	<i>AK2+AK3</i>	0.2036	0.5726
Free Ile	<i>AK3</i>	0.0072	0.9842
Free Ile	<i>AK-HSDH1</i>	0.1238	0.7333
Free Ile	<i>AK-HSDH2</i>	-0.0194	0.9575
Free Ile	<i>AK-HSDHs</i>	0.0599	0.8694
Free Ile	<i>AK-HSDHs+CGS1</i>	0.2845	0.4256
<b>Free Ile</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.5377</b>	<b>0.1089</b>
<b>Free Ile</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>0.5597</b>	<b>0.0925</b>
<b>Free Ile</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>0.5517</b>	<b>0.0983</b>
Free Ile	<i>AKs</i>	0.1282	0.7242
Free Ile	<i>AKs/AK-HSDHs</i>	0.0821	0.8215
Free Ile	<i>AKs+AK-HSDHs</i>	0.1495	0.6801
Free Ile	<i>AKs+AK-HSDHs+CGS1</i>	0.2490	0.4879
Free Ile	<i>AKs+AK-HSDHs+DHDPSs</i>	0.1691	0.6405
<b>Free Ile</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>0.4369</b>	<b>0.2068</b>
<b>Free Ile</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>0.4609</b>	<b>0.1800</b>
<b>Free Ile</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>0.4422</b>	<b>0.2006</b>
Free Ile	<i>AKs+DHDPSs</i>	0.1494	0.6804
<b>Free Ile</b>	<b><i>BCAT1</i></b>	<b>-0.4659</b>	<b>0.1748</b>
<b>Free Ile</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4900</b>	<b>0.1506</b>
Free Ile	Catabolic genes analyzed	0.1736	0.6315

<b>Free Ile</b>	<b>CGS1</b>	<b>0.4694</b>	<b>0.1711</b>
Free Ile	CGS1/SAMSs	0.1711	0.6364
Free Ile	CGS1/TS1	-0.3868	0.2695
<b>Free Ile</b>	<b>DHDPS1</b>	<b>0.6690</b>	<b>0.0344</b>
Free Ile	DHDPS2	0.2548	0.4775
<b>Free Ile</b>	<b>DHDPSs</b>	<b>0.5613</b>	<b>0.0914</b>
Free Ile	DHDPSs/AK-HSDHs	0.1187	0.7440
Free Ile	DHDPSs/LKR-SDH1	0.0651	0.8582
<b>Free Ile</b>	<b>Free Ala</b>	<b>0.4919</b>	<b>0.1487</b>
<b>Free Ile</b>	<b>Free Arg</b>	<b>0.4947</b>	<b>0.1460</b>
<b>Free Ile</b>	<b>Free Asn</b>	<b>0.4443</b>	<b>0.1983</b>
Free Ile	Free Asp	0.2024	0.5750
<b>Free Ile</b>	<b>Free Cys</b>	<b>0.4324</b>	<b>0.2120</b>
Free Ile	Free Gln	0.3515	0.3192
Free Ile	Free Glu	0.1440	0.6915
Free Ile	Free Gly	0.1316	0.7171
<b>Free Ile</b>	<b>Free His</b>	<b>0.5512</b>	<b>0.0986</b>
Free Ile	HSDH activity with four effectors	0.3951	0.2584
<b>Free Ile</b>	<b>HSDH activity without effectors</b>	<b>0.4146</b>	<b>0.2336</b>
Free Ile	LKR-SDH1	0.2554	0.4764
Free Ile	Lys-sensitive AK activity	0.0164	0.9641
Free Ile	Lys-sensitive AK activity/Thr-sensitive AK activity	0.3737	0.2875
Free Ile	SAMS1	0.3867	0.2696
<b>Free Ile</b>	<b>SAMS2</b>	<b>0.7854</b>	<b>0.0071</b>
Free Ile	SAMS3	-0.0518	0.8869
Free Ile	SAMS4	0.2817	0.4304
Free Ile	SAMSs	0.1685	0.6418
<b>Free Ile</b>	<b>TD1</b>	<b>0.5921</b>	<b>0.0713</b>
<b>Free Ile</b>	<b>TD1/BCAT1</b>	<b>0.4107</b>	<b>0.2384</b>
Free Ile	THA1	-0.0788	0.8287
<b>Free Ile</b>	<b>THA2</b>	<b>0.7280</b>	<b>0.0170</b>
<b>Free Ile</b>	<b>THAs</b>	<b>0.6990</b>	<b>0.0245</b>
<b>Free Ile</b>	<b>THAs+TD1</b>	<b>0.7197</b>	<b>0.0189</b>
Free Ile	Thr-sensitive AK activity	-0.1850	0.6089
<b>Free Ile</b>	<b>TS1</b>	<b>0.6774</b>	<b>0.0314</b>
<b>Free Ile</b>	<b>TS1/(THAs+TD1)</b>	<b>-0.4377</b>	<b>0.2059</b>
<b>Free Ile</b>	<b>TS1/TD1</b>	<b>-0.5386</b>	<b>0.1082</b>
Free Ile	TS1/THAs	0.1413	0.6971
Free Ile/Thr	(AK-HSDHs+CGS1)/SAMSs	0.0498	0.8914
Free Ile/Thr	(AK-HSDHs+TS1)/(THAs+TD1)	0.2434	0.4980
Free Ile/Thr	(AK-HSDHs+TS1+TD1)/BCAT1	0.0337	0.9264
<b>Free Ile/Thr</b>	<b>(AKs+AK-HSDHs)/AK-HSDHs</b>	<b>-0.6946</b>	<b>0.0258</b>
<b>Free Ile/Thr</b>	<b>(AKs+AK-HSDHs+CGS1)/SAMSs</b>	<b>-0.6214</b>	<b>0.0551</b>
Free Ile/Thr	(AKs+AK-HSDHs+DHDPSs)/LKR-SDH1	-0.0889	0.8071
Free Ile/Thr	(AKs+AK-HSDHs+TS1)/(THAs+TD1)	-0.1801	0.6186
Free Ile/Thr	(AKs+AK-HSDHs+TS1+TD1)/BCAT1	0.0049	0.9894
Free Ile/Thr	(AKs+DHDPSs)/LKR-SDH1	-0.2670	0.4558
<b>Free Ile/Thr</b>	<b>AK activity with four effectors</b>	<b>-0.5285</b>	<b>0.1163</b>
<b>Free Ile/Thr</b>	<b>AK activity without effectors</b>	<b>-0.5260</b>	<b>0.1184</b>
<b>Free Ile/Thr</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>-0.7412</b>	<b>0.0142</b>
<b>Free Ile/Thr</b>	<b>AK activity/HSDH activity without effectors</b>	<b>-0.6581</b>	<b>0.0386</b>
Free Ile/Thr	AK1	-0.0685	0.8509
<b>Free Ile/Thr</b>	<b>AK1+AK2</b>	<b>-0.7790</b>	<b>0.0079</b>
Free Ile/Thr	AK1+AK3	0.0222	0.9514
<b>Free Ile/Thr</b>	<b>AK2</b>	<b>-0.7370</b>	<b>0.0150</b>
<b>Free Ile/Thr</b>	<b>AK2+AK3</b>	<b>-0.6959</b>	<b>0.0254</b>
Free Ile/Thr	AK3	0.1224	0.7362
Free Ile/Thr	AK-HSDH1	0.3703	0.2921

Free Ile/Thr	<i>AK-HSDH2</i>	0.2988	0.4017
<b>Free Ile/Thr</b>	<b><i>AK-HSDHs</i></b>	<b>0.4028</b>	<b>0.2485</b>
Free Ile/Thr	<i>AK-HSDHs+CGSI</i>	0.2903	0.4159
Free Ile/Thr	<i>AK-HSDHs+TSI</i>	0.1818	0.6152
Free Ile/Thr	<i>AK-HSDHs+TSI+TDI</i>	0.1741	0.6305
Free Ile/Thr	<i>AK-HSDHs+TSI+THAs</i>	0.1710	0.6367
<b>Free Ile/Thr</b>	<b><i>AKs</i></b>	<b>-0.7440</b>	<b>0.0136</b>
<b>Free Ile/Thr</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>-0.6946</b>	<b>0.0258</b>
<b>Free Ile/Thr</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>-0.6674</b>	<b>0.0350</b>
<b>Free Ile/Thr</b>	<b><i>AKs+AK-HSDHs+CGSI</i></b>	<b>-0.6049</b>	<b>0.0639</b>
<b>Free Ile/Thr</b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>-0.6604</b>	<b>0.0377</b>
<b>Free Ile/Thr</b>	<b><i>AKs+AK-HSDHs+TSI</i></b>	<b>-0.4942</b>	<b>0.1465</b>
<b>Free Ile/Thr</b>	<b><i>AKs+AK-HSDHs+TSI+TDI</i></b>	<b>-0.4759</b>	<b>0.1644</b>
<b>Free Ile/Thr</b>	<b><i>AKs+AK-HSDHs+TSI+THAs</i></b>	<b>-0.5002</b>	<b>0.1409</b>
<b>Free Ile/Thr</b>	<b><i>AKs+DHDPSs</i></b>	<b>-0.7399</b>	<b>0.0144</b>
Free Ile/Thr	<i>BCAT1</i>	-0.0479	0.8955
<b>Free Ile/Thr</b>	<b>Biosynthetic genes analyzed</b>	<b>-0.4263</b>	<b>0.2192</b>
Free Ile/Thr	Catabolic genes analyzed	0.2083	0.5637
Free Ile/Thr	<i>CGSI</i>	0.1087	0.7651
Free Ile/Thr	<i>CGSI/SAMs</i>	-0.1830	0.6128
Free Ile/Thr	<i>CGSI/TSI</i>	-0.0690	0.8498
Free Ile/Thr	<i>DHDPS1</i>	-0.1768	0.6251
Free Ile/Thr	<i>DHDPS2</i>	0.2038	0.5722
Free Ile/Thr	<i>DHDPSs</i>	0.0214	0.9532
<b>Free Ile/Thr</b>	<b><i>DHDPSs/AK-HSDHs</i></b>	<b>-0.4014</b>	<b>0.2502</b>
Free Ile/Thr	<i>DHDPSs/LKR-SDH1</i>	0.3652	0.2994
<b>Free Ile/Thr</b>	<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>-0.8292</b>	<b>0.0030</b>
Free Ile/Thr	Free Ala	0.3179	0.3707
Free Ile/Thr	Free Arg	0.0639	0.8608
Free Ile/Thr	Free Asn	0.0371	0.9190
Free Ile/Thr	Free Asn+Asp	0.1726	0.6336
<b>Free Ile/Thr</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>-0.6892</b>	<b>0.0275</b>
<b>Free Ile/Thr</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>-0.6918</b>	<b>0.0267</b>
Free Ile/Thr	Free Asp	0.1852	0.6085
<b>Free Ile/Thr</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>-0.7113</b>	<b>0.0211</b>
<b>Free Ile/Thr</b>	<b>Free Cys</b>	<b>-0.7931</b>	<b>0.0062</b>
Free Ile/Thr	Free Gln	0.0586	0.8723
Free Ile/Thr	Free Glu	-0.1395	0.7006
Free Ile/Thr	Free Gly	0.1395	0.7008
<b>Free Ile/Thr</b>	<b>Free Gly/Thr</b>	<b>0.8894</b>	<b>0.0006</b>
Free Ile/Thr	Free Gly+Ile	0.1206	0.7401
Free Ile/Thr	Free His	0.0299	0.9346
Free Ile/Thr	Free Ile	-0.2762	0.4399
Free Ile/Thr	Free Leu	0.2099	0.5605
Free Ile/Thr	Free Lys	0.0452	0.9014
<b>Free Ile/Thr</b>	<b>Free Lys/(Met+Thr+Ile)</b>	<b>0.9804</b>	<b>&lt;.0001</b>
<b>Free Ile/Thr</b>	<b>Free Lys/Thr</b>	<b>0.9837</b>	<b>&lt;.0001</b>
<b>Free Ile/Thr</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>-0.8338</b>	<b>0.0027</b>
Free Ile/Thr	Free Met	0.1667	0.6454
<b>Free Ile/Thr</b>	<b>Free Met/Thr</b>	<b>0.9469</b>	<b>&lt;.0001</b>
<b>Free Ile/Thr</b>	<b>Free Met+Thr+Ile</b>	<b>-0.8343</b>	<b>0.0027</b>
Free Ile/Thr	Free Phe	0.3469	0.3261
Free Ile/Thr	Free Pro	0.0668	0.8545
<b>Free Ile/Thr</b>	<b>Free Ser</b>	<b>0.5149</b>	<b>0.1278</b>
<b>Free Ile/Thr</b>	<b>Free Thr</b>	<b>-0.8340</b>	<b>0.0027</b>
Free Ile/Thr	Free Trp	0.3808	0.2776
Free Ile/Thr	Free Tyr	0.3038	0.3935
Free Ile/Thr	Free Val	0.3857	0.2709

Free Ile/Thr	HSDH activity with four effectors	0.2711	0.4486
Free Ile/Thr	HSDH activity without effectors	0.2419	0.5008
Free Ile/Thr	<i>LKR-SDHI</i>	-0.3050	0.3914
<b>Free Ile/Thr</b>	<b>Lys-sensitive AK activity</b>	<b>-0.6586</b>	<b>0.0384</b>
<b>Free Ile/Thr</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.6391</b>	<b>0.0467</b>
Free Ile/Thr	<i>SAMS1</i>	0.3076	0.3873
Free Ile/Thr	<i>SAMS2</i>	-0.0852	0.8149
Free Ile/Thr	<i>SAMS3</i>	0.0807	0.8247
Free Ile/Thr	<i>SAMS4</i>	0.2611	0.4662
Free Ile/Thr	<i>SAMSs</i>	0.2111	0.5583
Free Ile/Thr	<i>TD1</i>	0.0735	0.8401
Free Ile/Thr	<i>TD1/BCAT1</i>	0.0429	0.9063
Free Ile/Thr	<i>THA1</i>	0.1669	0.6450
<b>Free Ile/Thr</b>	<b><i>THA2</i></b>	<b>-0.5484</b>	<b>0.1007</b>
<b>Free Ile/Thr</b>	<b><i>THAs</i></b>	<b>-0.5894</b>	<b>0.0730</b>
Free Ile/Thr	<i>THAs+TD1</i>	-0.0374	0.9184
<b>Free Ile/Thr</b>	<b>Thr-sensitive AK activity</b>	<b>0.7050</b>	<b>0.0228</b>
Free Ile/Thr	Total free AAs	-0.1175	0.7464
Free Ile/Thr	<i>TS1</i>	0.0611	0.8669
Free Ile/Thr	<i>TS1/(THAs+TD1)</i>	0.2103	0.5598
Free Ile/Thr	<i>TS1/TD1</i>	0.1671	0.6444
Free Ile/Thr	<i>TS1/THAs</i>	0.3504	0.3209
Free Leu	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.0832	0.8192
<b>Free Leu</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.5010</b>	<b>0.1402</b>
<b>Free Leu</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.7077</b>	<b>0.0220</b>
Free Leu	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.3139	0.3772
Free Leu	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2356	0.5123
Free Leu	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.0436	0.9048
<b>Free Leu</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.6386</b>	<b>0.0469</b>
<b>Free Leu</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.6999</b>	<b>0.0242</b>
Free Leu	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0371	0.9190
Free Leu	AK activity with four effectors	-0.0671	0.8540
Free Leu	AK activity without effectors	-0.1962	0.5870
Free Leu	AK activity/HSDH activity with four effectors	-0.3338	0.3459
Free Leu	AK activity/HSDH activity without effectors	-0.2694	0.4517
Free Leu	<i>AK1</i>	-0.1406	0.6984
Free Leu	<i>AK1+AK2</i>	-0.0722	0.8428
Free Leu	<i>AK1+AK3</i>	-0.0941	0.7961
Free Leu	<i>AK2</i>	-0.0398	0.9131
Free Leu	<i>AK2+AK3</i>	-0.0316	0.9309
Free Leu	<i>AK3</i>	0.0472	0.8970
Free Leu	<i>AK-HSDH1</i>	0.0722	0.8429
<b>Free Leu</b>	<b><i>AK-HSDH2</i></b>	<b>0.6243</b>	<b>0.0537</b>
<b>Free Leu</b>	<b><i>AK-HSDHs</i></b>	<b>0.4506</b>	<b>0.1912</b>
<b>Free Leu</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>0.5980</b>	<b>0.0679</b>
<b>Free Leu</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.6289</b>	<b>0.0514</b>
<b>Free Leu</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>0.6678</b>	<b>0.0348</b>
<b>Free Leu</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>0.6299</b>	<b>0.0510</b>
Free Leu	<i>AKs</i>	-0.0628	0.8631
Free Leu	<i>AKs/AK-HSDHs</i>	-0.3139	0.3772
Free Leu	<i>AKs+AK-HSDHs</i>	0.0540	0.8821
Free Leu	<i>AKs+AK-HSDHs+CGS1</i>	0.1971	0.5851
Free Leu	<i>AKs+AK-HSDHs+DHDPSs</i>	0.0862	0.8127
Free Leu	<i>AKs+AK-HSDHs+TS1</i>	0.3366	0.3417
Free Leu	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.3802	0.2785
Free Leu	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.3343	0.3451
Free Leu	<i>AKs+DHDPSs</i>	-0.0283	0.9381



<b>Free Leu</b>	<i>BCAT1</i>	<b>-0.8518</b>	<b>0.0018</b>
<b>Free Leu</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4377</b>	<b>0.2058</b>
<b>Free Leu</b>	<b>Catabolic genes analyzed</b>	<b>0.5547</b>	<b>0.0961</b>
<b>Free Leu</b>	<i>CGS1</i>	<b>0.6417</b>	<b>0.0455</b>
Free Leu	<i>CGS1/SAMSs</i>	-0.2042	0.5715
Free Leu	<i>CGS1/TS1</i>	-0.1810	0.6168
<b>Free Leu</b>	<i>DHDPS1</i>	<b>0.5491</b>	<b>0.1002</b>
<b>Free Leu</b>	<i>DHDPS2</i>	<b>0.7661</b>	<b>0.0098</b>
<b>Free Leu</b>	<i>DHDPSs</i>	<b>0.8498</b>	<b>0.0019</b>
Free Leu	<i>DHDPSs/AK-HSDHs</i>	-0.2506	0.4849
<b>Free Leu</b>	<i>DHDPSs/LKR-SDHI</i>	<b>0.5281</b>	<b>0.1166</b>
<b>Free Leu</b>	<b>Free Ala</b>	<b>0.8538</b>	<b>0.0017</b>
<b>Free Leu</b>	<b>Free Arg</b>	<b>0.8204</b>	<b>0.0036</b>
<b>Free Leu</b>	<b>Free Asn</b>	<b>0.8901</b>	<b>0.0006</b>
<b>Free Leu</b>	<b>Free Asp</b>	<b>0.7282</b>	<b>0.0169</b>
Free Leu	Free Cys	0.1520	0.6750
<b>Free Leu</b>	<b>Free Gln</b>	<b>0.8413</b>	<b>0.0023</b>
<b>Free Leu</b>	<b>Free Glu</b>	<b>0.5385</b>	<b>0.1083</b>
<b>Free Leu</b>	<b>Free Gly</b>	<b>0.6373</b>	<b>0.0475</b>
<b>Free Leu</b>	<b>Free His</b>	<b>0.9195</b>	<b>0.0002</b>
<b>Free Leu</b>	<b>Free Ile</b>	<b>0.5983</b>	<b>0.0677</b>
<b>Free Leu</b>	<b>HSDH activity with four effectors</b>	<b>0.5628</b>	<b>0.0903</b>
Free Leu	HSDH activity without effectors	0.2941	0.4095
Free Leu	<i>LKR-SDHI</i>	-0.1811	0.6165
<b>Free Leu</b>	<b>Lys-sensitive AK activity</b>	<b>-0.5077</b>	<b>0.1341</b>
Free Leu	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.1851	0.6087
<b>Free Leu</b>	<i>SAMS1</i>	<b>0.7818</b>	<b>0.0076</b>
<b>Free Leu</b>	<i>SAMS2</i>	<b>0.7420</b>	<b>0.0140</b>
Free Leu	<i>SAMS3</i>	0.2121	0.5564
<b>Free Leu</b>	<i>SAMS4</i>	<b>0.6069</b>	<b>0.0628</b>
<b>Free Leu</b>	<i>SAMSs</i>	<b>0.5538</b>	<b>0.0967</b>
<b>Free Leu</b>	<i>TD1</i>	<b>0.8626</b>	<b>0.0013</b>
<b>Free Leu</b>	<i>TD1/BCAT1</i>	<b>0.7534</b>	<b>0.0119</b>
Free Leu	<i>THA1</i>	-0.3242	0.3608
Free Leu	<i>THA2</i>	0.1549	0.6692
Free Leu	<i>THAs</i>	0.1234	0.7341
<b>Free Leu</b>	<i>THAs+TD1</i>	<b>0.8593</b>	<b>0.0014</b>
Free Leu	Thr-sensitive AK activity	0.0912	0.8021
<b>Free Leu</b>	<i>TS1</i>	<b>0.6245</b>	<b>0.0536</b>
<b>Free Leu</b>	<i>TS1/(THAs+TD1)</i>	<b>-0.6106</b>	<b>0.0608</b>
<b>Free Leu</b>	<i>TS1/TD1</i>	<b>-0.6605</b>	<b>0.0376</b>
<b>Free Leu</b>	<i>TS1/THAs</i>	<b>0.5376</b>	<b>0.1090</b>
Free Lys	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.0400	0.9127
<b>Free Lys</b>	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>-0.5708</b>	<b>0.0848</b>
<b>Free Lys</b>	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<b>0.7606</b>	<b>0.0106</b>
Free Lys	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.1071	0.7683
Free Lys	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.0342	0.9253
Free Lys	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.0487	0.8937
<b>Free Lys</b>	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>-0.5852</b>	<b>0.0756</b>
<b>Free Lys</b>	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	<b>0.7622</b>	<b>0.0104</b>
Free Lys	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.0232	0.9493
Free Lys	AK activity with four effectors	0.0058	0.9872
Free Lys	AK activity without effectors	-0.1483	0.6826
Free Lys	AK activity/HSDH activity with four effectors	-0.2127	0.5552
Free Lys	AK activity/HSDH activity without effectors	-0.1233	0.7344
Free Lys	<i>AK1</i>	-0.1522	0.6747
Free Lys	<i>AK1+AK2</i>	0.1136	0.7547
Free Lys	<i>AK1+AK3</i>	-0.1296	0.7213

Free Lys	AK2	0.1419	0.6957
Free Lys	AK2+AK3	0.1394	0.7010
Free Lys	AK3	0.0155	0.9662
Free Lys	AK-HSDH1	-0.1182	0.7450
<b>Free Lys</b>	<b>AK-HSDH2</b>	<b>0.5536</b>	<b>0.0968</b>
Free Lys	AK-HSDHs	0.2979	0.4031
<b>Free Lys</b>	<b>AK-HSDHs+CGS1</b>	<b>0.4971</b>	<b>0.1438</b>
<b>Free Lys</b>	<b>AK-HSDHs+TS1</b>	<b>0.4965</b>	<b>0.1444</b>
<b>Free Lys</b>	<b>AK-HSDHs+TS1+TD1</b>	<b>0.5372</b>	<b>0.1093</b>
<b>Free Lys</b>	<b>AK-HSDHs+TS1+THAs</b>	<b>0.5004</b>	<b>0.1407</b>
Free Lys	AKs	0.1142	0.7535
Free Lys	AKs/AK-HSDHs	-0.1071	0.7683
Free Lys	AKs+AK-HSDHs	0.1976	0.5842
Free Lys	AKs+AK-HSDHs+CGS1	0.3270	0.3564
Free Lys	AKs+AK-HSDHs+DHDPSs	0.2253	0.5314
Free Lys	AKs+AK-HSDHs+TS1	0.3991	0.2532
<b>Free Lys</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>0.4359</b>	<b>0.2079</b>
Free Lys	AKs+AK-HSDHs+TS1+THAs	0.3987	0.2538
Free Lys	AKs+DHDPSs	0.1447	0.6900
<b>Free Lys</b>	<b>BCAT1</b>	<b>-0.8902</b>	<b>0.0006</b>
<b>Free Lys</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4875</b>	<b>0.1529</b>
<b>Free Lys</b>	<b>Catabolic genes analyzed</b>	<b>0.4098</b>	<b>0.2396</b>
<b>Free Lys</b>	<b>CGS1</b>	<b>0.6166</b>	<b>0.0576</b>
Free Lys	CGS1/SAMSs	-0.0288	0.9370
Free Lys	CGS1/TS1	-0.0407	0.9110
<b>Free Lys</b>	<b>DHDPS1</b>	<b>0.5311</b>	<b>0.1142</b>
<b>Free Lys</b>	<b>DHDPS2</b>	<b>0.6690</b>	<b>0.0344</b>
<b>Free Lys</b>	<b>DHDPSs</b>	<b>0.7704</b>	<b>0.0091</b>
Free Lys	DHDPSs/AK-HSDHs	-0.1031	0.7769
Free Lys	DHDPSs/LKR-SDH1	0.3876	0.2684
<b>Free Lys</b>	<b>Free Ala</b>	<b>0.7653</b>	<b>0.0099</b>
<b>Free Lys</b>	<b>Free Arg</b>	<b>0.8426</b>	<b>0.0022</b>
<b>Free Lys</b>	<b>Free Asn</b>	<b>0.8832</b>	<b>0.0007</b>
<b>Free Lys</b>	<b>Free Asp</b>	<b>0.7091</b>	<b>0.0217</b>
Free Lys	Free Cys	0.2438	0.4973
<b>Free Lys</b>	<b>Free Gln</b>	<b>0.8201</b>	<b>0.0037</b>
<b>Free Lys</b>	<b>Free Glu</b>	<b>0.6085</b>	<b>0.0619</b>
<b>Free Lys</b>	<b>Free Gly</b>	<b>0.5459</b>	<b>0.1026</b>
<b>Free Lys</b>	<b>Free His</b>	<b>0.9154</b>	<b>0.0002</b>
<b>Free Lys</b>	<b>Free Ile</b>	<b>0.6085</b>	<b>0.0619</b>
<b>Free Lys</b>	<b>Free Leu</b>	<b>0.9672</b>	<b>&lt;.0001</b>
<b>Free Lys</b>	<b>HSDH activity with four effectors</b>	<b>0.5035</b>	<b>0.1379</b>
Free Lys	HSDH activity without effectors	0.1982	0.5831
Free Lys	LKR-SDH1	-0.1051	0.7726
Free Lys	Lys-sensitive AK activity	-0.3984	0.2541
Free Lys	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.0016	0.9964
<b>Free Lys</b>	<b>SAMS1</b>	<b>0.7123</b>	<b>0.0208</b>
<b>Free Lys</b>	<b>SAMS2</b>	<b>0.7001</b>	<b>0.0242</b>
Free Lys	SAMS3	0.0846	0.8163
<b>Free Lys</b>	<b>SAMS4</b>	<b>0.4542</b>	<b>0.1873</b>
<b>Free Lys</b>	<b>SAMSs</b>	<b>0.4091</b>	<b>0.2404</b>
<b>Free Lys</b>	<b>TD1</b>	<b>0.7818</b>	<b>0.0076</b>
<b>Free Lys</b>	<b>TD1/BCAT1</b>	<b>0.7991</b>	<b>0.0055</b>
Free Lys	THA1	-0.3406	0.3355
Free Lys	THA2	0.2950	0.4080
Free Lys	THAs	0.2760	0.4402
<b>Free Lys</b>	<b>THAs+TD1</b>	<b>0.8081</b>	<b>0.0047</b>
Free Lys	Thr-sensitive AK activity	-0.1153	0.7512

<b>Free Lys</b>	<i>TS1</i>	<b>0.5186</b>	<b>0.1246</b>
<b>Free Lys</b>	<i>TS1/(THAs+TD1)</i>	<b>-0.6673</b>	<b>0.0350</b>
<b>Free Lys</b>	<i>TS1/TD1</i>	<b>-0.6834</b>	<b>0.0294</b>
Free Lys	<i>TS1/THAs</i>	0.3530	0.3171
Free Lys/(Met+Thr+Ile)	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.0020	0.9955
Free Lys/(Met+Thr+Ile)	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1611	0.6567
Free Lys/(Met+Thr+Ile)	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.1665	0.6456
<b>Free Lys/(Met+Thr+Ile)</b>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	<b>-0.7191</b>	<b>0.0191</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<b>-0.6321</b>	<b>0.0499</b>
Free Lys/(Met+Thr+Ile)	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.0342	0.9253
Free Lys/(Met+Thr+Ile)	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.2465	0.4924
Free Lys/(Met+Thr+Ile)	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.1397	0.7004
Free Lys/(Met+Thr+Ile)	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.2139	0.5529
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AK activity with four effectors</b>	<b>-0.5071</b>	<b>0.1347</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AK activity without effectors</b>	<b>-0.5678</b>	<b>0.0868</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>-0.7320</b>	<b>0.0161</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AK activity/HSDH activity without effectors</b>	<b>-0.6433</b>	<b>0.0448</b>
Free Lys/(Met+Thr+Ile)	<i>AK1</i>	-0.0194	0.9575
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AK1+AK2</b>	<b>-0.7303</b>	<b>0.0165</b>
Free Lys/(Met+Thr+Ile)	<i>AK1+AK3</i>	0.0499	0.8911
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AK2</b>	<b>-0.7000</b>	<b>0.0242</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AK2+AK3</b>	<b>-0.6638</b>	<b>0.0364</b>
Free Lys/(Met+Thr+Ile)	<i>AK3</i>	0.1003	0.7828
Free Lys/(Met+Thr+Ile)	<i>AK-HSDH1</i>	0.3357	0.3429
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AK-HSDH2</b>	<b>0.4355</b>	<b>0.2083</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AK-HSDHs</b>	<b>0.4729</b>	<b>0.1675</b>
Free Lys/(Met+Thr+Ile)	<i>AK-HSDHs+CGS1</i>	0.3716	0.2904
Free Lys/(Met+Thr+Ile)	<i>AK-HSDHs+TS1</i>	0.2341	0.5151
Free Lys/(Met+Thr+Ile)	<i>AK-HSDHs+TS1+TD1</i>	0.2339	0.5154
Free Lys/(Met+Thr+Ile)	<i>AK-HSDHs+TS1+THAs</i>	0.2222	0.5371
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AKs</b>	<b>-0.7001</b>	<b>0.0242</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AKs/AK-HSDHs</b>	<b>-0.7191</b>	<b>0.0191</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AKs+AK-HSDHs</b>	<b>-0.6031</b>	<b>0.0649</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AKs+AK-HSDHs+CGS1</b>	<b>-0.5266</b>	<b>0.1179</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>-0.5915</b>	<b>0.0717</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AKs+AK-HSDHs+TS1</b>	<b>-0.4263</b>	<b>0.2192</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>-0.4026</b>	<b>0.2488</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AKs+AK-HSDHs+TS1+THAs</b>	<b>-0.4332</b>	<b>0.2111</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>AKs+DHDPSs</b>	<b>-0.6907</b>	<b>0.0270</b>
Free Lys/(Met+Thr+Ile)	<i>BCAT1</i>	-0.1949	0.5895
Free Lys/(Met+Thr+Ile)	Biosynthetic genes analyzed	-0.3479	0.3246
Free Lys/(Met+Thr+Ile)	Catabolic genes analyzed	0.3089	0.3851
Free Lys/(Met+Thr+Ile)	<i>CGS1</i>	0.1873	0.6043
Free Lys/(Met+Thr+Ile)	<i>CGS1/SAMSs</i>	-0.2499	0.4862
Free Lys/(Met+Thr+Ile)	<i>CGS1/TS1</i>	-0.0377	0.9176
Free Lys/(Met+Thr+Ile)	<i>DHDPS1</i>	-0.1163	0.7491
Free Lys/(Met+Thr+Ile)	<i>DHDPS2</i>	0.3375	0.3403
Free Lys/(Met+Thr+Ile)	<i>DHDPSs</i>	0.1521	0.6748
<b>Free Lys/(Met+Thr+Ile)</b>	<b>DHDPSs/AK-HSDHs</b>	<b>-0.4530</b>	<b>0.1886</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>DHDPSs/LKR-SDHI</b>	<b>0.4583</b>	<b>0.1828</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>-0.8918</b>	<b>0.0005</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Ala</b>	<b>0.4253</b>	<b>0.2205</b>
Free Lys/(Met+Thr+Ile)	Free Arg	0.1946	0.5900
Free Lys/(Met+Thr+Ile)	Free Asn	0.1953	0.5887
Free Lys/(Met+Thr+Ile)	Free Asn+Asp	0.3149	0.3755
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>-0.6425</b>	<b>0.0451</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>-0.6463</b>	<b>0.0435</b>

Free Lys/(Met+Thr+Ile)	Free Asp	0.3224	0.3636
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>-0.6744</b>	<b>0.0324</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Cys</b>	<b>-0.7243</b>	<b>0.0178</b>
Free Lys/(Met+Thr+Ile)	Free Gln	0.2206	0.5402
Free Lys/(Met+Thr+Ile)	Free Glu	-0.0147	0.9679
Free Lys/(Met+Thr+Ile)	Free Gly	0.2816	0.4305
Free Lys/(Met+Thr+Ile)	Free Gly+Ile	0.2630	0.4629
Free Lys/(Met+Thr+Ile)	Free His	0.1760	0.6267
Free Lys/(Met+Thr+Ile)	Free Ile	-0.2492	0.4875
Free Lys/(Met+Thr+Ile)	Free Leu	0.3549	0.3143
Free Lys/(Met+Thr+Ile)	Free Lys	0.1990	0.5815
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>-0.8534</b>	<b>0.0017</b>
Free Lys/(Met+Thr+Ile)	Free Met	0.2886	0.4187
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Met+Thr+Ile</b>	<b>-0.8595</b>	<b>0.0014</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Phe</b>	<b>0.4719</b>	<b>0.1685</b>
Free Lys/(Met+Thr+Ile)	Free Pro	0.2422	0.5001
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Ser</b>	<b>0.6119</b>	<b>0.0601</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Thr</b>	<b>-0.8621</b>	<b>0.0013</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Trp</b>	<b>0.5125</b>	<b>0.1298</b>
Free Lys/(Met+Thr+Ile)	Free Tyr	0.3874	0.2687
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Free Val</b>	<b>0.4576</b>	<b>0.1836</b>
Free Lys/(Met+Thr+Ile)	HSDH activity with four effectors	0.3405	0.3356
Free Lys/(Met+Thr+Ile)	HSDH activity without effectors	0.2418	0.5009
Free Lys/(Met+Thr+Ile)	<i>LKR-SDHI</i>	-0.3659	0.2984
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Lys-sensitive AK activity</b>	<b>-0.7232</b>	<b>0.0181</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.6860</b>	<b>0.0285</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>SAMS1</b>	<b>0.4122</b>	<b>0.2366</b>
Free Lys/(Met+Thr+Ile)	<i>SAMS2</i>	-0.0149	0.9674
Free Lys/(Met+Thr+Ile)	<i>SAMS3</i>	0.1471	0.6850
Free Lys/(Met+Thr+Ile)	<i>SAMS4</i>	0.3445	0.3296
Free Lys/(Met+Thr+Ile)	<i>SAMSs</i>	0.3121	0.3799
Free Lys/(Met+Thr+Ile)	<i>TD1</i>	0.1931	0.5930
Free Lys/(Met+Thr+Ile)	<i>TD1/BCAT1</i>	0.1844	0.6100
Free Lys/(Met+Thr+Ile)	<i>THA1</i>	0.0782	0.8300
<b>Free Lys/(Met+Thr+Ile)</b>	<b>THA2</b>	<b>-0.5718</b>	<b>0.0842</b>
<b>Free Lys/(Met+Thr+Ile)</b>	<b>THAs</b>	<b>-0.6148</b>	<b>0.0586</b>
Free Lys/(Met+Thr+Ile)	<i>THAs+TD1</i>	0.0714	0.8447
<b>Free Lys/(Met+Thr+Ile)</b>	<b>Thr-sensitive AK activity</b>	<b>0.6639</b>	<b>0.0363</b>
Free Lys/(Met+Thr+Ile)	Total free AAs	0.0284	0.9380
Free Lys/(Met+Thr+Ile)	<i>TS1</i>	0.0985	0.7867
Free Lys/(Met+Thr+Ile)	<i>TS1/(THAs+TD1)</i>	0.0943	0.7956
Free Lys/(Met+Thr+Ile)	<i>TS1/TD1</i>	0.0632	0.8624
<b>Free Lys/(Met+Thr+Ile)</b>	<b>TS1/THAs</b>	<b>0.4411</b>	<b>0.2020</b>
<b>Free Lys/Asp</b>	<i>(AK-HSDHs+CGS1)/SAMSs</i>	<b>0.5986</b>	<b>0.0675</b>
<b>Free Lys/Asp</b>	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>0.4067</b>	<b>0.2435</b>
<b>Free Lys/Asp</b>	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<b>0.4628</b>	<b>0.1780</b>
Free Lys/Asp	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.0682	0.8516
Free Lys/Asp	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.2047	0.5704
<b>Free Lys/Asp</b>	<b><i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i></b>	<b>0.4479</b>	<b>0.1942</b>
<b>Free Lys/Asp</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>0.4200</b>	<b>0.2269</b>
<b>Free Lys/Asp</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.4575</b>	<b>0.1837</b>
<b>Free Lys/Asp</b>	<b><i>(AKs+DHDPSs)/LKR-SDHI</i></b>	<b>0.4635</b>	<b>0.1773</b>
<b>Free Lys/Asp</b>	<b>AK activity with four effectors</b>	<b>0.6771</b>	<b>0.0315</b>
<b>Free Lys/Asp</b>	<b>AK activity without effectors</b>	<b>0.7785</b>	<b>0.0080</b>
Free Lys/Asp	AK activity/HSDH activity with four effectors	0.1690	0.6408
Free Lys/Asp	AK activity/HSDH activity without effectors	0.0229	0.9499
Free Lys/Asp	<i>AK1</i>	-0.2283	0.5258
Free Lys/Asp	<i>AK1+AK2</i>	0.2848	0.4252

<b>Free Lys/Asp</b>	<b>AK1+AK3</b>	<b>-0.5783</b>	<b>0.0799</b>
Free Lys/Asp	AK2	0.3219	0.3644
Free Lys/Asp	AK2+AK3	0.2310	0.5208
<b>Free Lys/Asp</b>	<b>AK3</b>	<b>-0.4697</b>	<b>0.1708</b>
Free Lys/Asp	AK-HSDH1	0.3972	0.2557
Free Lys/Asp	AK-HSDH2	-0.0551	0.8798
Free Lys/Asp	AK-HSDHs	0.1920	0.5951
Free Lys/Asp	AK-HSDHs+CGS1	0.3809	0.2775
Free Lys/Asp	AK-HSDHs+TS1	0.3116	0.3809
Free Lys/Asp	AK-HSDHs+TS1+TD1	0.2701	0.4504
Free Lys/Asp	AK-HSDHs+TS1+THAs	0.3223	0.3638
Free Lys/Asp	AKs	0.1938	0.5917
Free Lys/Asp	AKs/AK-HSDHs	-0.0682	0.8516
Free Lys/Asp	AKs+AK-HSDHs	0.2515	0.4834
Free Lys/Asp	AKs+AK-HSDHs+CGS1	0.3547	0.3146
Free Lys/Asp	AKs+AK-HSDHs+DHDPSs	0.2432	0.4983
Free Lys/Asp	AKs+AK-HSDHs+TS1	0.3505	0.3208
Free Lys/Asp	AKs+AK-HSDHs+TS1+TD1	0.3265	0.3572
Free Lys/Asp	AKs+AK-HSDHs+TS1+THAs	0.3556	0.3132
Free Lys/Asp	AKs+DHDPSs	0.1875	0.6040
Free Lys/Asp	BCAT1	0.3207	0.3662
Free Lys/Asp	Biosynthetic genes analyzed	0.3990	0.2534
Free Lys/Asp	Catabolic genes analyzed	-0.0235	0.9486
<b>Free Lys/Asp</b>	<b>CGS1</b>	<b>0.5067</b>	<b>0.1350</b>
Free Lys/Asp	CGS1/SAMSs	0.3432	0.3316
Free Lys/Asp	CGS1/TS1	-0.0009	0.9981
Free Lys/Asp	DHDPS1	-0.1830	0.6128
Free Lys/Asp	DHDPS2	-0.0228	0.9502
Free Lys/Asp	DHDPSs	-0.1528	0.6734
Free Lys/Asp	DHDPSs/AK-HSDHs	-0.2894	0.4174
Free Lys/Asp	DHDPSs/LKR-SDH1	0.1763	0.6261
Free Lys/Asp	Free (Lys+Met+Thr+Ile)/Asp	0.3484	0.3238
Free Lys/Asp	Free Ala	-0.3188	0.3693
Free Lys/Asp	Free Arg	0.1715	0.6356
Free Lys/Asp	Free Asn	-0.2854	0.4241
<b>Free Lys/Asp</b>	<b>Free Asn+Asp</b>	<b>-0.6059</b>	<b>0.0634</b>
Free Lys/Asp	Free Asn+Asp+Lys+Met+Thr+Ile	-0.1555	0.6680
Free Lys/Asp	Free Asn+Asp+Lys+Thr+Ile	-0.1557	0.6676
<b>Free Lys/Asp</b>	<b>Free Asp</b>	<b>-0.6471</b>	<b>0.0431</b>
Free Lys/Asp	Free Asp+Lys+Met+Thr+Ile	-0.1397	0.7002
Free Lys/Asp	Free Cys	-0.0090	0.9803
Free Lys/Asp	Free Gln	-0.3537	0.3160
<b>Free Lys/Asp</b>	<b>Free Glu</b>	<b>-0.5972</b>	<b>0.0683</b>
<b>Free Lys/Asp</b>	<b>Free Gly</b>	<b>-0.5475</b>	<b>0.1014</b>
<b>Free Lys/Asp</b>	<b>Free Gly/Thr</b>	<b>-0.5494</b>	<b>0.0999</b>
<b>Free Lys/Asp</b>	<b>Free Gly+Ile</b>	<b>-0.5168</b>	<b>0.1261</b>
Free Lys/Asp	Free His	-0.0273	0.9403
Free Lys/Asp	Free Ile	0.3955	0.2579
Free Lys/Asp	Free Ile/Thr	-0.2611	0.4663
Free Lys/Asp	Free Leu	0.0030	0.9935
Free Lys/Asp	Free Lys	0.0600	0.8693
Free Lys/Asp	Free Lys/(Met+Thr+Ile)	-0.2834	0.4275
Free Lys/Asp	Free Lys/Thr	-0.3083	0.3862
Free Lys/Asp	Free Lys+Met+Thr+Ile	0.1284	0.7237
Free Lys/Asp	Free Met	-0.2017	0.5762
<b>Free Lys/Asp</b>	<b>Free Met/Thr</b>	<b>-0.4222</b>	<b>0.2242</b>
Free Lys/Asp	Free Met+Thr+Ile	0.1260	0.7286

Free Lys/Asp	Free Phe	-0.0104	0.9774
<b>Free Lys/Asp</b>	<b>Free Pro</b>	<b>-0.4467</b>	<b>0.1956</b>
<b>Free Lys/Asp</b>	<b>Free Ser</b>	<b>-0.5291</b>	<b>0.1158</b>
Free Lys/Asp	Free Thr	0.1218	0.7375
Free Lys/Asp	Free Trp	0.0126	0.9725
Free Lys/Asp	Free Tyr	0.2878	0.4200
Free Lys/Asp	Free Val	-0.0137	0.9701
<b>Free Lys/Asp</b>	<b>HSDH activity with four effectors</b>	<b>0.5846</b>	<b>0.0759</b>
<b>Free Lys/Asp</b>	<b>HSDH activity without effectors</b>	<b>0.6788</b>	<b>0.0309</b>
Free Lys/Asp	<i>LKR-SDHI</i>	-0.2853	0.4243
<b>Free Lys/Asp</b>	<b>Lys-sensitive AK activity</b>	<b>0.6398</b>	<b>0.0463</b>
Free Lys/Asp	Lys-sensitive AK activity/Thr-sensitive AK activity	0.2947	0.4085
<b>Free Lys/Asp</b>	<b>SAMS1</b>	<b>-0.4717</b>	<b>0.1687</b>
Free Lys/Asp	<i>SAMS2</i>	-0.1679	0.6430
Free Lys/Asp	<i>SAMS3</i>	0.1980	0.5835
Free Lys/Asp	<i>SAMS4</i>	0.0085	0.9815
Free Lys/Asp	<i>SAMSs</i>	-0.0248	0.9457
Free Lys/Asp	<i>TD1</i>	-0.2068	0.5664
<b>Free Lys/Asp</b>	<b>TD1/BCAT1</b>	<b>0.4180</b>	<b>0.2293</b>
Free Lys/Asp	<i>THA1</i>	-0.2390	0.5061
<b>Free Lys/Asp</b>	<b>THA2</b>	<b>0.6100</b>	<b>0.0611</b>
<b>Free Lys/Asp</b>	<b>THAs</b>	<b>0.5259</b>	<b>0.1184</b>
Free Lys/Asp	<i>THAs+TD1</i>	-0.0866	0.8120
Free Lys/Asp	Thr-sensitive AK activity	-0.0875	0.8101
<b>Free Lys/Asp</b>	<b>Total free AAs</b>	<b>-0.4743</b>	<b>0.1660</b>
Free Lys/Asp	<i>TS1</i>	0.3245	0.3604
<b>Free Lys/Asp</b>	<b>TS1/(THAs+TD1)</b>	<b>0.4155</b>	<b>0.2324</b>
Free Lys/Asp	<i>TS1/TD1</i>	0.3705	0.2920
Free Lys/Asp	<i>TS1/THAs</i>	-0.2584	0.4711
Free Lys/Thr	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.0169	0.9631
Free Lys/Thr	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1351	0.7099
Free Lys/Thr	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.1470	0.6853
<b>Free Lys/Thr</b>	<b>(AKs+AK-HSDHs)/AK-HSDHs</b>	<b>-0.6987</b>	<b>0.0246</b>
<b>Free Lys/Thr</b>	<b>(AKs+AK-HSDHs+CGS1)/SAMSs</b>	<b>-0.6342</b>	<b>0.0489</b>
Free Lys/Thr	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.0992	0.7851
Free Lys/Thr	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.2826	0.4289
Free Lys/Thr	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.1201	0.7411
Free Lys/Thr	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.2733	0.4449
<b>Free Lys/Thr</b>	<b>AK activity with four effectors</b>	<b>-0.5410</b>	<b>0.1064</b>
<b>Free Lys/Thr</b>	<b>AK activity without effectors</b>	<b>-0.5838</b>	<b>0.0764</b>
<b>Free Lys/Thr</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>-0.7338</b>	<b>0.0157</b>
<b>Free Lys/Thr</b>	<b>AK activity/HSDH activity without effectors</b>	<b>-0.6491</b>	<b>0.0423</b>
Free Lys/Thr	<i>AK1</i>	-0.0324	0.9293
<b>Free Lys/Thr</b>	<b>AK1+AK2</b>	<b>-0.7415</b>	<b>0.0141</b>
Free Lys/Thr	<i>AK1+AK3</i>	0.0353	0.9228
<b>Free Lys/Thr</b>	<b>AK2</b>	<b>-0.7082</b>	<b>0.0219</b>
<b>Free Lys/Thr</b>	<b>AK2+AK3</b>	<b>-0.6724</b>	<b>0.0331</b>
Free Lys/Thr	<i>AK3</i>	0.0971	0.7896
Free Lys/Thr	<i>AK-HSDH1</i>	0.3118	0.3805
Free Lys/Thr	<i>AK-HSDH2</i>	0.3798	0.2791
<b>Free Lys/Thr</b>	<b>AK-HSDHs</b>	<b>0.4231</b>	<b>0.2231</b>
Free Lys/Thr	<i>AK-HSDHs+CGS1</i>	0.3288	0.3537
Free Lys/Thr	<i>AK-HSDHs+TS1</i>	0.2363	0.5110
Free Lys/Thr	<i>AK-HSDHs+TS1+TD1</i>	0.2366	0.5104
Free Lys/Thr	<i>AK-HSDHs+TS1+THAs</i>	0.2254	0.5313
<b>Free Lys/Thr</b>	<b>AKs</b>	<b>-0.7117</b>	<b>0.0210</b>
<b>Free Lys/Thr</b>	<b>AKs/AK-HSDHs</b>	<b>-0.6987</b>	<b>0.0246</b>
<b>Free Lys/Thr</b>	<b>AKs+AK-HSDHs</b>	<b>-0.6284</b>	<b>0.0517</b>

<b>Free Lys/Thr</b>	<i>AKs+AK-HSDHs+CGSI</i>	<b>-0.5565</b>	<b>0.0948</b>
<b>Free Lys/Thr</b>	<i>AKs+AK-HSDHs+DHDPSs</i>	<b>-0.6162</b>	<b>0.0578</b>
<b>Free Lys/Thr</b>	<i>AKs+AK-HSDHs+TSI</i>	<b>-0.4343</b>	<b>0.2098</b>
<b>Free Lys/Thr</b>	<i>AKs+AK-HSDHs+TSI+TDI</i>	<b>-0.4101</b>	<b>0.2391</b>
<b>Free Lys/Thr</b>	<i>AKs+AK-HSDHs+TSI+THAs</i>	<b>-0.4407</b>	<b>0.2023</b>
<b>Free Lys/Thr</b>	<i>AKs+DHDPSs</i>	<b>-0.7020</b>	<b>0.0236</b>
Free Lys/Thr	<i>BCATI</i>	-0.1855	0.6080
Free Lys/Thr	Biosynthetic genes analyzed	-0.3594	0.3077
Free Lys/Thr	Catabolic genes analyzed	0.2742	0.4433
Free Lys/Thr	<i>CGSI</i>	0.1603	0.6582
Free Lys/Thr	<i>CGSI/SAMSs</i>	-0.2329	0.5172
Free Lys/Thr	<i>CGSI/TSI</i>	-0.0941	0.7960
Free Lys/Thr	<i>DHDPS1</i>	-0.0804	0.8253
Free Lys/Thr	<i>DHDPS2</i>	0.3228	0.3629
Free Lys/Thr	<i>DHDPSs</i>	0.1627	0.6534
Free Lys/Thr	<i>DHDPSs/AK-HSDHs</i>	-0.3929	0.2614
<b>Free Lys/Thr</b>	<i>DHDPSs/LKR-SDHI</i>	<b>0.4133</b>	<b>0.2352</b>
<b>Free Lys/Thr</b>	<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>-0.8557</b>	<b>0.0016</b>
<b>Free Lys/Thr</b>	<b>Free Ala</b>	<b>0.4222</b>	<b>0.2242</b>
Free Lys/Thr	Free Arg	0.1694	0.6398
Free Lys/Thr	Free Asn	0.1850	0.6089
Free Lys/Thr	Free Asn+Asp	0.3173	0.3716
<b>Free Lys/Thr</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>-0.6050</b>	<b>0.0639</b>
<b>Free Lys/Thr</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>-0.6087</b>	<b>0.0618</b>
Free Lys/Thr	Free Asp	0.3263	0.3575
<b>Free Lys/Thr</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>-0.6352</b>	<b>0.0485</b>
<b>Free Lys/Thr</b>	<b>Free Cys</b>	<b>-0.7078</b>	<b>0.0220</b>
Free Lys/Thr	Free Gln	0.2003	0.5790
Free Lys/Thr	Free Glu	-0.0036	0.9920
Free Lys/Thr	Free Gly	0.2628	0.4633
Free Lys/Thr	Free Gly+Ile	0.2459	0.4934
Free Lys/Thr	Free His	0.1632	0.6524
Free Lys/Thr	Free Ile	-0.2232	0.5353
Free Lys/Thr	Free Leu	0.3496	0.3221
Free Lys/Thr	Free Lys	0.1900	0.5991
<b>Free Lys/Thr</b>	<b>Free Lys/(Met+Thr+Ile)</b>	<b>0.9938</b>	<b>&lt;.0001</b>
<b>Free Lys/Thr</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>-0.8138</b>	<b>0.0042</b>
Free Lys/Thr	Free Met	0.3186	0.3696
<b>Free Lys/Thr</b>	<b>Free Met+Thr+Ile</b>	<b>-0.8196</b>	<b>0.0037</b>
<b>Free Lys/Thr</b>	<b>Free Phe</b>	<b>0.4558</b>	<b>0.1855</b>
Free Lys/Thr	Free Pro	0.2179	0.5453
<b>Free Lys/Thr</b>	<b>Free Ser</b>	<b>0.5723</b>	<b>0.0839</b>
<b>Free Lys/Thr</b>	<b>Free Thr</b>	<b>-0.8219</b>	<b>0.0035</b>
<b>Free Lys/Thr</b>	<b>Free Trp</b>	<b>0.4890</b>	<b>0.1515</b>
Free Lys/Thr	Free Tyr	0.3731	0.2883
<b>Free Lys/Thr</b>	<b>Free Val</b>	<b>0.4599</b>	<b>0.1811</b>
Free Lys/Thr	HSDH activity with four effectors	0.2880	0.4197
Free Lys/Thr	HSDH activity without effectors	0.2167	0.5476
Free Lys/Thr	<i>LKR-SDHI</i>	-0.3088	0.3853
<b>Free Lys/Thr</b>	<b>Lys-sensitive AK activity</b>	<b>-0.7222</b>	<b>0.0183</b>
<b>Free Lys/Thr</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.6639</b>	<b>0.0363</b>
<b>Free Lys/Thr</b>	<i>SAMS1</i>	<b>0.4155</b>	<b>0.2324</b>
Free Lys/Thr	<i>SAMS2</i>	0.0179	0.9608
Free Lys/Thr	<i>SAMS3</i>	0.1011	0.7810
Free Lys/Thr	<i>SAMS4</i>	0.3218	0.3646
Free Lys/Thr	<i>SAMSs</i>	0.2769	0.4386
Free Lys/Thr	<i>TDI</i>	0.1959	0.5875
Free Lys/Thr	<i>TDI/BCATI</i>	0.1633	0.6521

Free Lys/Thr	<i>THA1</i>	0.1141	0.7537
<b>Free Lys/Thr</b>	<b><i>THA2</i></b>	<b>-0.5493</b>	<b>0.1000</b>
<b>Free Lys/Thr</b>	<b><i>THAs</i></b>	<b>-0.5817</b>	<b>0.0777</b>
Free Lys/Thr	<i>THAs+TD1</i>	0.0808	0.8243
<b>Free Lys/Thr</b>	<b>Thr-sensitive AK activity</b>	<b>0.6860</b>	<b>0.0285</b>
Free Lys/Thr	Total free AAs	0.0285	0.9376
Free Lys/Thr	<i>TS1</i>	0.1236	0.7337
Free Lys/Thr	<i>TS1/(THAs+TD1)</i>	0.0962	0.7916
Free Lys/Thr	<i>TS1/TD1</i>	0.0363	0.9207
<b>Free Lys/Thr</b>	<b><i>TS1/THAs</i></b>	<b>0.4134</b>	<b>0.2350</b>
Free Lys+Met+Thr+Ile	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.1160	0.7497
Free Lys+Met+Thr+Ile	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.2833	0.4277
Free Lys+Met+Thr+Ile	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0957	0.7925
<b>Free Lys+Met+Thr+Ile</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>0.6401</b>	<b>0.0462</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.5659</b>	<b>0.0882</b>
Free Lys+Met+Thr+Ile	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.2172	0.5466
Free Lys+Met+Thr+Ile	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0113	0.9753
Free Lys+Met+Thr+Ile	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0754	0.8361
Free Lys+Met+Thr+Ile	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0752	0.8363
Free Lys+Met+Thr+Ile	AK activity with four effectors	0.2436	0.4976
Free Lys+Met+Thr+Ile	AK activity without effectors	0.3545	0.3149
<b>Free Lys+Met+Thr+Ile</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.4498</b>	<b>0.1921</b>
Free Lys+Met+Thr+Ile	AK activity/HSDH activity without effectors	0.3784	0.2809
Free Lys+Met+Thr+Ile	<i>AK1</i>	0.0464	0.8988
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AK1+AK2</i></b>	<b>0.6238</b>	<b>0.0539</b>
Free Lys+Met+Thr+Ile	<i>AK1+AK3</i>	0.0569	0.8760
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AK2</i></b>	<b>0.5909</b>	<b>0.0720</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AK2+AK3</i></b>	<b>0.5762</b>	<b>0.0813</b>
Free Lys+Met+Thr+Ile	<i>AK3</i>	0.0034	0.9925
Free Lys+Met+Thr+Ile	<i>AK-HSDH1</i>	-0.2784	0.4360
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AK-HSDH2</i></b>	<b>-0.4419</b>	<b>0.2010</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AK-HSDHs</i></b>	<b>-0.4443</b>	<b>0.1982</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>-0.4024</b>	<b>0.2489</b>
Free Lys+Met+Thr+Ile	<i>AK-HSDHs+TS1</i>	-0.0042	0.9908
Free Lys+Met+Thr+Ile	<i>AK-HSDHs+TS1+TD1</i>	0.0063	0.9862
Free Lys+Met+Thr+Ile	<i>AK-HSDHs+TS1+THAs</i>	0.0081	0.9822
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AKs</i></b>	<b>0.6144</b>	<b>0.0588</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>0.6401</b>	<b>0.0462</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.5213</b>	<b>0.1223</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b>0.4298</b>	<b>0.2151</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>0.5236</b>	<b>0.1204</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>0.4987</b>	<b>0.1423</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>0.4892</b>	<b>0.1513</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>0.5041</b>	<b>0.1374</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>AKs+DHDPSs</i></b>	<b>0.6185</b>	<b>0.0566</b>
Free Lys+Met+Thr+Ile	<i>BCAT1</i>	-0.0195	0.9573
<b>Free Lys+Met+Thr+Ile</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4080</b>	<b>0.2418</b>
Free Lys+Met+Thr+Ile	Catabolic genes analyzed	-0.2980	0.4030
Free Lys+Met+Thr+Ile	<i>CGS1</i>	-0.2750	0.4419
Free Lys+Met+Thr+Ile	<i>CGS1/SAMSs</i>	0.1609	0.6570
<b>Free Lys+Met+Thr+Ile</b>	<b><i>CGS1/TS1</i></b>	<b>-0.4086</b>	<b>0.2411</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>DHDPS1</i></b>	<b>0.5642</b>	<b>0.0893</b>
Free Lys+Met+Thr+Ile	<i>DHDPS2</i>	-0.2296	0.5234
Free Lys+Met+Thr+Ile	<i>DHDPSs</i>	0.1900	0.5990
<b>Free Lys+Met+Thr+Ile</b>	<b><i>DHDPSs/AK-HSDHs</i></b>	<b>0.5585</b>	<b>0.0933</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>-0.4779</b>	<b>0.1624</b>
Free Lys+Met+Thr+Ile	Free Ala	-0.1596	0.6596



Free Lys+Met+Thr+Ile	Free Arg	-0.0420	0.9083
Free Lys+Met+Thr+Ile	Free Asn	0.0370	0.9191
Free Lys+Met+Thr+Ile	Free Asp	-0.0763	0.8341
<b>Free Lys+Met+Thr+Ile</b>	<b>Free Cys</b>	<b>0.8638</b>	<b>0.0013</b>
Free Lys+Met+Thr+Ile	Free Gln	-0.0450	0.9017
Free Lys+Met+Thr+Ile	Free Glu	0.2166	0.5478
Free Lys+Met+Thr+Ile	Free Gly	-0.0942	0.7959
Free Lys+Met+Thr+Ile	Free His	-0.0100	0.9781
<b>Free Lys+Met+Thr+Ile</b>	<b>Free Ile</b>	<b>0.4994</b>	<b>0.1416</b>
Free Lys+Met+Thr+Ile	Free Leu	-0.1168	0.7480
Free Lys+Met+Thr+Ile	Free Lys	-0.0194	0.9576
Free Lys+Met+Thr+Ile	Free Met	-0.1209	0.7394
Free Lys+Met+Thr+Ile	Free Phe	-0.2566	0.4742
Free Lys+Met+Thr+Ile	Free Pro	-0.1030	0.7771
<b>Free Lys+Met+Thr+Ile</b>	<b>Free Ser</b>	<b>-0.4742</b>	<b>0.1662</b>
<b>Free Lys+Met+Thr+Ile</b>	<b>Free Thr</b>	<b>0.9984</b>	<b>&lt;.0001</b>
Free Lys+Met+Thr+Ile	Free Trp	-0.3425	0.3327
Free Lys+Met+Thr+Ile	Free Tyr	-0.2783	0.4363
Free Lys+Met+Thr+Ile	Free Val	-0.2296	0.5235
Free Lys+Met+Thr+Ile	HSDH activity with four effectors	-0.3018	0.3968
Free Lys+Met+Thr+Ile	HSDH activity without effectors	-0.1717	0.6353
<b>Free Lys+Met+Thr+Ile</b>	<b>LKR-SDHI</b>	<b>0.6404</b>	<b>0.0461</b>
<b>Free Lys+Met+Thr+Ile</b>	<b>Lys-sensitive AK activity</b>	<b>0.5107</b>	<b>0.1314</b>
<b>Free Lys+Met+Thr+Ile</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.6061</b>	<b>0.0632</b>
Free Lys+Met+Thr+Ile	<i>SAMS1</i>	-0.2122	0.5561
<b>Free Lys+Met+Thr+Ile</b>	<b><i>SAMS2</i></b>	<b>0.4127</b>	<b>0.2359</b>
Free Lys+Met+Thr+Ile	<i>SAMS3</i>	-0.2609	0.4666
Free Lys+Met+Thr+Ile	<i>SAMS4</i>	-0.2833	0.4277
Free Lys+Met+Thr+Ile	<i>SAMSs</i>	-0.3031	0.3947
Free Lys+Met+Thr+Ile	<i>TD1</i>	0.0676	0.8527
Free Lys+Met+Thr+Ile	<i>TD1/BCAT1</i>	-0.1034	0.7763
Free Lys+Met+Thr+Ile	<i>THA1</i>	0.1613	0.6563
<b>Free Lys+Met+Thr+Ile</b>	<b><i>THA2</i></b>	<b>0.5344</b>	<b>0.1116</b>
<b>Free Lys+Met+Thr+Ile</b>	<b><i>THAs</i></b>	<b>0.6157</b>	<b>0.0581</b>
Free Lys+Met+Thr+Ile	<i>THAs+TD1</i>	0.1853	0.6083
<b>Free Lys+Met+Thr+Ile</b>	<b>Thr-sensitive AK activity</b>	<b>-0.5507</b>	<b>0.0990</b>
Free Lys+Met+Thr+Ile	Total free AAs	0.2192	0.5430
Free Lys+Met+Thr+Ile	<i>TS1</i>	0.1912	0.5966
Free Lys+Met+Thr+Ile	<i>TS1/(THAs+TD1)</i>	-0.1857	0.6076
Free Lys+Met+Thr+Ile	<i>TS1/TD1</i>	-0.2522	0.4820
Free Lys+Met+Thr+Ile	<i>TS1/THAs</i>	-0.2301	0.5225
Free Met	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.1201	0.7410
<b>Free Met</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.6690</b>	<b>0.0344</b>
<b>Free Met</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.6313</b>	<b>0.0503</b>
Free Met	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.0635	0.8617
Free Met	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.1891	0.6009
Free Met	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.3122	0.3798
<b>Free Met</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.7439</b>	<b>0.0136</b>
<b>Free Met</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.6323</b>	<b>0.0498</b>
Free Met	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.3094	0.3844
Free Met	AK activity with four effectors	-0.2973	0.4041
<b>Free Met</b>	<b>AK activity without effectors</b>	<b>-0.4467</b>	<b>0.1956</b>
Free Met	AK activity/HSDH activity with four effectors	-0.2570	0.4735
Free Met	AK activity/HSDH activity without effectors	-0.1968	0.5858
Free Met	<i>AK1</i>	-0.0205	0.9551
Free Met	<i>AK1+AK2</i>	-0.0988	0.7859
Free Met	<i>AK1+AK3</i>	-0.1747	0.6292

Free Met	AK2	-0.0904	0.8039
Free Met	AK2+AK3	-0.1227	0.7356
Free Met	AK3	-0.1888	0.6014
Free Met	AK-HSDH1	-0.3670	0.2969
Free Met	AK-HSDH2	0.2528	0.4810
Free Met	AK-HSDHs	-0.0383	0.9163
Free Met	AK-HSDHs+CGS1	0.1683	0.6421
Free Met	AK-HSDHs+TS1	0.1497	0.6797
Free Met	AK-HSDHs+TS1+TD1	0.1923	0.5946
Free Met	AK-HSDHs+TS1+THAs	0.1528	0.6734
Free Met	AKs	-0.1315	0.7173
Free Met	AKs/AK-HSDHs	-0.0635	0.8617
Free Met	AKs+AK-HSDHs	-0.1465	0.6863
Free Met	AKs+AK-HSDHs+CGS1	-0.0570	0.8757
Free Met	AKs+AK-HSDHs+DHDPSs	-0.1245	0.7318
Free Met	AKs+AK-HSDHs+TS1	-0.0147	0.9678
Free Met	AKs+AK-HSDHs+TS1+TD1	0.0193	0.9578
Free Met	AKs+AK-HSDHs+TS1+THAs	-0.0137	0.9700
Free Met	AKs+DHDPSs	-0.1093	0.7637
<b>Free Met</b>	<b>BCAT1</b>	<b>-0.7695</b>	<b>0.0093</b>
Free Met	Biosynthetic genes analyzed	0.0632	0.8622
Free Met	Catabolic genes analyzed	0.2045	0.5710
Free Met	CGS1	0.3576	0.3103
Free Met	CGS1/SAMSs	0.0348	0.9240
Free Met	CGS1/TS1	0.0647	0.8590
<b>Free Met</b>	<b>DHDPS1</b>	<b>0.4111</b>	<b>0.2379</b>
<b>Free Met</b>	<b>DHDPS2</b>	<b>0.4535</b>	<b>0.1881</b>
<b>Free Met</b>	<b>DHDPSs</b>	<b>0.5503</b>	<b>0.0993</b>
Free Met	DHDPSs/AK-HSDHs	0.1699	0.6389
Free Met	DHDPSs/LKR-SDH1	0.1301	0.7202
<b>Free Met</b>	<b>Free Ala</b>	<b>0.5728</b>	<b>0.0835</b>
<b>Free Met</b>	<b>Free Arg</b>	<b>0.5668</b>	<b>0.0875</b>
<b>Free Met</b>	<b>Free Asn</b>	<b>0.6977</b>	<b>0.0249</b>
<b>Free Met</b>	<b>Free Asp</b>	<b>0.7355</b>	<b>0.0153</b>
Free Met	Free Cys	0.1562	0.6666
<b>Free Met</b>	<b>Free Gln</b>	<b>0.6696</b>	<b>0.0342</b>
<b>Free Met</b>	<b>Free Glu</b>	<b>0.5887</b>	<b>0.0734</b>
<b>Free Met</b>	<b>Free Gly</b>	<b>0.4927</b>	<b>0.1480</b>
<b>Free Met</b>	<b>Free His</b>	<b>0.6711</b>	<b>0.0336</b>
Free Met	Free Ile	0.3612	0.3052
<b>Free Met</b>	<b>Free Leu</b>	<b>0.7813</b>	<b>0.0076</b>
<b>Free Met</b>	<b>Free Lys</b>	<b>0.8176</b>	<b>0.0039</b>
Free Met	HSDH activity with four effectors	0.1324	0.7154
Free Met	HSDH activity without effectors	-0.0346	0.9245
Free Met	LKR-SDH1	0.0000	1.0000
<b>Free Met</b>	<b>Lys-sensitive AK activity</b>	<b>-0.5405</b>	<b>0.1068</b>
Free Met	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.0011	0.9976
<b>Free Met</b>	<b>SAMS1</b>	<b>0.6725</b>	<b>0.0331</b>
<b>Free Met</b>	<b>SAMS2</b>	<b>0.4836</b>	<b>0.1568</b>
Free Met	SAMS3	-0.1098	0.7628
Free Met	SAMS4	0.2072	0.5656
Free Met	SAMSs	0.2051	0.5698
<b>Free Met</b>	<b>TD1</b>	<b>0.5447</b>	<b>0.1035</b>
<b>Free Met</b>	<b>TD1/BCAT1</b>	<b>0.6618</b>	<b>0.0371</b>
Free Met	THA1	-0.2182	0.5447
Free Met	THA2	0.1417	0.6961
Free Met	THAs	0.1580	0.6629
<b>Free Met</b>	<b>THAs+TD1</b>	<b>0.5537</b>	<b>0.0968</b>

Free Met	Thr-sensitive AK activity	-0.0880	0.8090
Free Met	<i>TS1</i>	0.2136	0.5536
<b>Free Met</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.6323</b>	<b>0.0498</b>
<b>Free Met</b>	<b><i>TS1/TD1</i></b>	<b>-0.7269</b>	<b>0.0172</b>
Free Met	<i>TS1/THAs</i>	0.1467	0.6859
Free Met/(Thr+Ile)	<i>(AK-HSDHs+CGS1)/SAMs</i>	-0.0900	0.8046
Free Met/(Thr+Ile)	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0466	0.8982
Free Met/(Thr+Ile)	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.2218	0.5380
<b>Free Met/(Thr+Ile)</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>-0.6869</b>	<b>0.0282</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMs</i></b>	<b>-0.6689</b>	<b>0.0344</b>
Free Met/(Thr+Ile)	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.2212	0.5391
Free Met/(Thr+Ile)	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.3767	0.2833
Free Met/(Thr+Ile)	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.1942	0.5909
Free Met/(Thr+Ile)	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.3864	0.2701
<b>Free Met/(Thr+Ile)</b>	<b>AK activity with four effectors</b>	<b>-0.6291</b>	<b>0.0513</b>
<b>Free Met/(Thr+Ile)</b>	<b>AK activity without effectors</b>	<b>-0.6811</b>	<b>0.0301</b>
<b>Free Met/(Thr+Ile)</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>-0.7768</b>	<b>0.0082</b>
<b>Free Met/(Thr+Ile)</b>	<b>AK activity/HSDH activity without effectors</b>	<b>-0.7227</b>	<b>0.0182</b>
Free Met/(Thr+Ile)	<i>AK1</i>	0.0597	0.8698
<b>Free Met/(Thr+Ile)</b>	<b><i>AK1+AK2</i></b>	<b>-0.7638</b>	<b>0.0101</b>
Free Met/(Thr+Ile)	<i>AK1+AK3</i>	-0.0094	0.9795
<b>Free Met/(Thr+Ile)</b>	<b><i>AK2</i></b>	<b>-0.7488</b>	<b>0.0127</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>AK2+AK3</i></b>	<b>-0.7403</b>	<b>0.0143</b>
Free Met/(Thr+Ile)	<i>AK3</i>	-0.0660	0.8562
Free Met/(Thr+Ile)	<i>AK-HSDH1</i>	0.2413	0.5018
Free Met/(Thr+Ile)	<i>AK-HSDH2</i>	0.3025	0.3955
Free Met/(Thr+Ile)	<i>AK-HSDHs</i>	0.3338	0.3458
Free Met/(Thr+Ile)	<i>AK-HSDHs+CGS1</i>	0.2426	0.4994
Free Met/(Thr+Ile)	<i>AK-HSDHs+TS1</i>	0.1373	0.7053
Free Met/(Thr+Ile)	<i>AK-HSDHs+TS1+TD1</i>	0.1422	0.6952
Free Met/(Thr+Ile)	<i>AK-HSDHs+TS1+THAs</i>	0.1261	0.7286
<b>Free Met/(Thr+Ile)</b>	<b><i>AKs</i></b>	<b>-0.7632</b>	<b>0.0102</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>-0.6869</b>	<b>0.0282</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>-0.7051</b>	<b>0.0227</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b>-0.6443</b>	<b>0.0444</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>-0.6921</b>	<b>0.0266</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>-0.5371</b>	<b>0.1094</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>-0.5115</b>	<b>0.1307</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>-0.5433</b>	<b>0.1046</b>
<b>Free Met/(Thr+Ile)</b>	<b><i>AKs+DHDPSs</i></b>	<b>-0.7531</b>	<b>0.0119</b>
Free Met/(Thr+Ile)	<i>BCAT1</i>	-0.2303	0.5221
<b>Free Met/(Thr+Ile)</b>	<b>Biosynthetic genes analyzed</b>	<b>-0.4635</b>	<b>0.1773</b>
Free Met/(Thr+Ile)	Catabolic genes analyzed	0.2501	0.4859
Free Met/(Thr+Ile)	<i>CGS1</i>	0.0941	0.7959
Free Met/(Thr+Ile)	<i>CGS1/SAMs</i>	-0.2374	0.5089
Free Met/(Thr+Ile)	<i>CGS1/TS1</i>	-0.0599	0.8694
Free Met/(Thr+Ile)	<i>DHDPS1</i>	-0.0168	0.9632
Free Met/(Thr+Ile)	<i>DHDPS2</i>	0.2746	0.4426
Free Met/(Thr+Ile)	<i>DHDPSs</i>	0.1691	0.6404
Free Met/(Thr+Ile)	<i>DHDPSs/AK-HSDHs</i>	-0.3250	0.3596
Free Met/(Thr+Ile)	<i>DHDPSs/LKR-SDHI</i>	0.3537	0.3161
<b>Free Met/(Thr+Ile)</b>	<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>-0.8270</b>	<b>0.0032</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Ala</b>	<b>0.4005</b>	<b>0.2514</b>
Free Met/(Thr+Ile)	Free Arg	0.1452	0.6891
Free Met/(Thr+Ile)	Free Asn	0.1941	0.5910
Free Met/(Thr+Ile)	Free Asn+Asp	0.3678	0.2958
<b>Free Met/(Thr+Ile)</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>-0.5604</b>	<b>0.0920</b>

<b>Free Met/(Thr+Ile)</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>-0.5643</b>	<b>0.0893</b>
Free Met/(Thr+Ile)	Free Asp	0.3832	0.2744
<b>Free Met/(Thr+Ile)</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>-0.5894</b>	<b>0.0729</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Cys</b>	<b>-0.6147</b>	<b>0.0586</b>
Free Met/(Thr+Ile)	Free Gln	0.2294	0.5237
Free Met/(Thr+Ile)	Free Glu	0.0072	0.9843
Free Met/(Thr+Ile)	Free Gly	0.3374	0.3403
<b>Free Met/(Thr+Ile)</b>	<b>Free Gly/Thr</b>	<b>0.9375</b>	<b>&lt;.0001</b>
Free Met/(Thr+Ile)	Free Gly+Ile	0.3200	0.3674
Free Met/(Thr+Ile)	Free His	0.1362	0.7075
Free Met/(Thr+Ile)	Free Ile	-0.2207	0.5401
<b>Free Met/(Thr+Ile)</b>	<b>Free Ile/Thr</b>	<b>0.9430</b>	<b>&lt;.0001</b>
Free Met/(Thr+Ile)	Free Leu	0.3674	0.2963
Free Met/(Thr+Ile)	Free Lys	0.2184	0.5444
<b>Free Met/(Thr+Ile)</b>	<b>Free Lys/(Met+Thr+Ile)</b>	<b>0.9675</b>	<b>&lt;.0001</b>
Free Met/(Thr+Ile)	Free Lys/Asp	-0.3325	0.3478
<b>Free Met/(Thr+Ile)</b>	<b>Free Lys/Thr</b>	<b>0.9743</b>	<b>&lt;.0001</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>-0.7893</b>	<b>0.0066</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Met</b>	<b>0.4111</b>	<b>0.2379</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Met/Thr</b>	<b>0.9850</b>	<b>&lt;.0001</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Met+Thr+Ile</b>	<b>-0.7962</b>	<b>0.0059</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Phe</b>	<b>0.4309</b>	<b>0.2138</b>
Free Met/(Thr+Ile)	Free Pro	0.2641	0.4609
<b>Free Met/(Thr+Ile)</b>	<b>Free Ser</b>	<b>0.6039</b>	<b>0.0645</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Thr</b>	<b>-0.8002</b>	<b>0.0054</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Thr/Asp</b>	<b>-0.8250</b>	<b>0.0033</b>
<b>Free Met/(Thr+Ile)</b>	<b>Free Trp</b>	<b>0.5059</b>	<b>0.1357</b>
Free Met/(Thr+Ile)	Free Tyr	0.3590	0.3084
Free Met/(Thr+Ile)	Free Val	0.3450	0.3288
Free Met/(Thr+Ile)	HSDH activity with four effectors	0.2513	0.4837
Free Met/(Thr+Ile)	HSDH activity without effectors	0.2216	0.5384
Free Met/(Thr+Ile)	<i>LKR-SDHI</i>	-0.2669	0.4560
<b>Free Met/(Thr+Ile)</b>	<b>Lys-sensitive AK activity</b>	<b>-0.7805</b>	<b>0.0077</b>
<b>Free Met/(Thr+Ile)</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.6734</b>	<b>0.0328</b>
<b>Free Met/(Thr+Ile)</b>	<b>SAMS1</b>	<b>0.4289</b>	<b>0.2162</b>
Free Met/(Thr+Ile)	<i>SAMS2</i>	-0.0021	0.9953
Free Met/(Thr+Ile)	<i>SAMS3</i>	0.0802	0.8258
Free Met/(Thr+Ile)	<i>SAMS4</i>	0.2541	0.4787
Free Met/(Thr+Ile)	<i>SAMSs</i>	0.2535	0.4798
Free Met/(Thr+Ile)	<i>TD1</i>	0.1710	0.6366
Free Met/(Thr+Ile)	<i>TD1/BCAT1</i>	0.2398	0.5046
Free Met/(Thr+Ile)	<i>THA1</i>	0.1530	0.6731
<b>Free Met/(Thr+Ile)</b>	<b>THA2</b>	<b>-0.5808</b>	<b>0.0783</b>
<b>Free Met/(Thr+Ile)</b>	<b>THAs</b>	<b>-0.6112</b>	<b>0.0605</b>
Free Met/(Thr+Ile)	<i>THAs+TD1</i>	0.0514	0.8880
<b>Free Met/(Thr+Ile)</b>	<b>Thr-sensitive AK activity</b>	<b>0.5859</b>	<b>0.0751</b>
Free Met/(Thr+Ile)	Total free AAs	0.0587	0.8720
Free Met/(Thr+Ile)	<i>TS1</i>	0.0334	0.9269
Free Met/(Thr+Ile)	<i>TS1/(THAs+TD1)</i>	0.0322	0.9296
Free Met/(Thr+Ile)	<i>TS1/TD1</i>	-0.0472	0.8971
<b>Free Met/(Thr+Ile)</b>	<b>TS1/THAs</b>	<b>0.4135</b>	<b>0.2349</b>
Free Met/Thr	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.1188	0.7438
Free Met/Thr	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0079	0.9828
Free Met/Thr	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.1070	0.7686
<b>Free Met/Thr</b>	<b>(AKs+AK-HSDHs)/AK-HSDHs</b>	<b>-0.6218</b>	<b>0.0549</b>
<b>Free Met/Thr</b>	<b>(AKs+AK-HSDHs+CGS1)/SAMSs</b>	<b>-0.6396</b>	<b>0.0464</b>
Free Met/Thr	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.2778	0.4371
Free Met/Thr	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.3970	0.2560

Free Met/Thr	(AKs+AK-HSDHs+TS1+TD1)/BCAT1	0.0817	0.8225
<b>Free Met/Thr</b>	(AKs+DHDPSs)/LKR-SDH1	<b>-0.4294</b>	<b>0.2156</b>
<b>Free Met/Thr</b>	<b>AK activity with four effectors</b>	<b>-0.6709</b>	<b>0.0337</b>
<b>Free Met/Thr</b>	<b>AK activity without effectors</b>	<b>-0.7017</b>	<b>0.0237</b>
<b>Free Met/Thr</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>-0.7313</b>	<b>0.0163</b>
<b>Free Met/Thr</b>	<b>AK activity/HSDH activity without effectors</b>	<b>-0.6558</b>	<b>0.0395</b>
Free Met/Thr	AK1	-0.0058	0.9873
<b>Free Met/Thr</b>	<b>AK1+AK2</b>	<b>-0.7593</b>	<b>0.0108</b>
Free Met/Thr	AK1+AK3	0.0021	0.9954
<b>Free Met/Thr</b>	<b>AK2</b>	<b>-0.7310</b>	<b>0.0163</b>
<b>Free Met/Thr</b>	<b>AK2+AK3</b>	<b>-0.7074</b>	<b>0.0221</b>
Free Met/Thr	AK3	0.0245	0.9464
Free Met/Thr	AK-HSDH1	0.1815	0.6158
Free Met/Thr	AK-HSDH2	0.2452	0.4947
Free Met/Thr	AK-HSDHs	0.2620	0.4646
Free Met/Thr	AK-HSDHs+CGS1	0.1705	0.6377
Free Met/Thr	AK-HSDHs+TS1	0.1109	0.7605
Free Met/Thr	AK-HSDHs+TS1+TD1	0.1178	0.7458
Free Met/Thr	AK-HSDHs+TS1+THAs	0.1001	0.7832
<b>Free Met/Thr</b>	<b>AKs</b>	<b>-0.7423</b>	<b>0.0139</b>
<b>Free Met/Thr</b>	<b>AKs/AK-HSDHs</b>	<b>-0.6218</b>	<b>0.0549</b>
<b>Free Met/Thr</b>	<b>AKs+AK-HSDHs</b>	<b>-0.7026</b>	<b>0.0235</b>
<b>Free Met/Thr</b>	<b>AKs+AK-HSDHs+CGS1</b>	<b>-0.6550</b>	<b>0.0398</b>
<b>Free Met/Thr</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>-0.6904</b>	<b>0.0271</b>
<b>Free Met/Thr</b>	<b>AKs+AK-HSDHs+TS1</b>	<b>-0.5365</b>	<b>0.1099</b>
<b>Free Met/Thr</b>	<b>AKs+AK-HSDHs+TS1+TD1</b>	<b>-0.5108</b>	<b>0.1314</b>
<b>Free Met/Thr</b>	<b>AKs+AK-HSDHs+TS1+THAs</b>	<b>-0.5423</b>	<b>0.1053</b>
<b>Free Met/Thr</b>	<b>AKs+DHDPSs</b>	<b>-0.7333</b>	<b>0.0158</b>
Free Met/Thr	BCAT1	-0.2021	0.5755
<b>Free Met/Thr</b>	<b>Biosynthetic genes analyzed</b>	<b>-0.4734</b>	<b>0.1670</b>
Free Met/Thr	Catabolic genes analyzed	0.1977	0.5840
Free Met/Thr	CGS1	0.0362	0.9210
Free Met/Thr	CGS1/SAMSs	-0.2172	0.5467
Free Met/Thr	CGS1/TS1	-0.0885	0.8078
Free Met/Thr	DHDPS1	-0.0246	0.9461
Free Met/Thr	DHDPS2	0.2492	0.4874
Free Met/Thr	DHDPSs	0.1477	0.6838
Free Met/Thr	DHDPSs/AK-HSDHs	-0.2438	0.4972
Free Met/Thr	DHDPSs/LKR-SDH1	0.2833	0.4277
<b>Free Met/Thr</b>	<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>-0.8010</b>	<b>0.0054</b>
<b>Free Met/Thr</b>	<b>Free Ala</b>	<b>0.4052</b>	<b>0.2454</b>
Free Met/Thr	Free Arg	0.0586	0.8722
Free Met/Thr	Free Asn	0.1602	0.6585
Free Met/Thr	Free Asn+Asp	0.3662	0.2980
<b>Free Met/Thr</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>-0.5305</b>	<b>0.1146</b>
<b>Free Met/Thr</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>-0.5343</b>	<b>0.1116</b>
Free Met/Thr	Free Asp	0.3863	0.2702
<b>Free Met/Thr</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>-0.5567</b>	<b>0.0946</b>
<b>Free Met/Thr</b>	<b>Free Cys</b>	<b>-0.6333</b>	<b>0.0493</b>
Free Met/Thr	Free Gln	0.1864	0.6061
Free Met/Thr	Free Glu	0.0421	0.9081
Free Met/Thr	Free Gly	0.3036	0.3938
Free Met/Thr	Free Gly+Ile	0.2850	0.4248
Free Met/Thr	Free His	0.0937	0.7969
Free Met/Thr	Free Ile	-0.2441	0.4967
Free Met/Thr	Free Leu	0.3138	0.3773
Free Met/Thr	Free Lys	0.1599	0.6589
<b>Free Met/Thr</b>	<b>Free Lys/(Met+Thr+Ile)</b>	<b>0.9546</b>	<b>&lt;.0001</b>

<b>Free Met/Thr</b>	<b>Free Lys/Thr</b>	<b>0.9744</b>	<b>&lt;.0001</b>
<b>Free Met/Thr</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>-0.7561</b>	<b>0.0114</b>
Free Met/Thr	Free Met	0.3931	0.2611
<b>Free Met/Thr</b>	<b>Free Met+Thr+Ile</b>	<b>-0.7610</b>	<b>0.0106</b>
Free Met/Thr	Free Phe	0.3865	0.2700
Free Met/Thr	Free Pro	0.2267	0.5289
<b>Free Met/Thr</b>	<b>Free Ser</b>	<b>0.5591</b>	<b>0.0929</b>
<b>Free Met/Thr</b>	<b>Free Thr</b>	<b>-0.7634</b>	<b>0.0102</b>
<b>Free Met/Thr</b>	<b>Free Trp</b>	<b>0.4334</b>	<b>0.2108</b>
Free Met/Thr	Free Tyr	0.3020	0.3964
Free Met/Thr	Free Val	0.3531	0.3169
Free Met/Thr	HSDH activity with four effectors	0.1205	0.7402
Free Met/Thr	HSDH activity without effectors	0.1015	0.7803
Free Met/Thr	<i>LKR-SDHI</i>	-0.1902	0.5987
<b>Free Met/Thr</b>	<b>Lys-sensitive AK activity</b>	<b>-0.7735</b>	<b>0.0087</b>
<b>Free Met/Thr</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.6642</b>	<b>0.0362</b>
<b>Free Met/Thr</b>	<b>SAMS1</b>	<b>0.4452</b>	<b>0.1972</b>
Free Met/Thr	<i>SAMS2</i>	0.0203	0.9555
Free Met/Thr	<i>SAMS3</i>	0.0038	0.9916
Free Met/Thr	<i>SAMS4</i>	0.2290	0.5246
Free Met/Thr	<i>SAMSs</i>	0.2004	0.5787
Free Met/Thr	<i>TD1</i>	0.1710	0.6366
Free Met/Thr	<i>TD1/BCAT1</i>	0.1250	0.7309
Free Met/Thr	<i>THA1</i>	0.2077	0.5648
<b>Free Met/Thr</b>	<b>THA2</b>	<b>-0.5787</b>	<b>0.0797</b>
<b>Free Met/Thr</b>	<b>THAs</b>	<b>-0.5917</b>	<b>0.0716</b>
Free Met/Thr	<i>THAs+TD1</i>	0.0538	0.8826
<b>Free Met/Thr</b>	<b>Thr-sensitive AK activity</b>	<b>0.6403</b>	<b>0.0461</b>
Free Met/Thr	Total free AAs	0.0544	0.8813
Free Met/Thr	<i>TS1</i>	0.0305	0.9333
Free Met/Thr	<i>TS1/(THAs+TD1)</i>	0.0186	0.9594
Free Met/Thr	<i>TS1/TD1</i>	-0.0753	0.8362
Free Met/Thr	<i>TS1/THAs</i>	0.3619	0.3041
Free Met+Thr+Ile	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.1173	0.7470
Free Met+Thr+Ile	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.2620	0.4647
Free Met+Thr+Ile	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1235	0.7339
<b>Free Met+Thr+Ile</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>0.6431</b>	<b>0.0449</b>
<b>Free Met+Thr+Ile</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.5664</b>	<b>0.0878</b>
Free Met+Thr+Ile	<i>(AKs+AK-HSDHs+DHDPs)/LKR-SDHI</i>	-0.2187	0.5438
Free Met+Thr+Ile	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0327	0.9285
Free Met+Thr+Ile	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1032	0.7766
Free Met+Thr+Ile	<i>(AKs+DHDPs)/LKR-SDHI</i>	-0.0760	0.8347
Free Met+Thr+Ile	AK activity with four effectors	0.2430	0.4987
Free Met+Thr+Ile	AK activity without effectors	0.3594	0.3077
<b>Free Met+Thr+Ile</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.4570</b>	<b>0.1843</b>
Free Met+Thr+Ile	AK activity/HSDH activity without effectors	0.3824	0.2754
Free Met+Thr+Ile	<i>AK1</i>	0.0519	0.8868
<b>Free Met+Thr+Ile</b>	<b>AK1+AK2</b>	<b>0.6188</b>	<b>0.0565</b>
Free Met+Thr+Ile	<i>AK1+AK3</i>	0.0615	0.8659
<b>Free Met+Thr+Ile</b>	<b>AK2</b>	<b>0.5849</b>	<b>0.0757</b>
<b>Free Met+Thr+Ile</b>	<b>AK2+AK3</b>	<b>0.5703</b>	<b>0.0852</b>
Free Met+Thr+Ile	<i>AK3</i>	0.0029	0.9938
Free Met+Thr+Ile	<i>AK-HSDH1</i>	-0.2737	0.4442
<b>Free Met+Thr+Ile</b>	<b>AK-HSDH2</b>	<b>-0.4616</b>	<b>0.1792</b>
<b>Free Met+Thr+Ile</b>	<b>AK-HSDHs</b>	<b>-0.4547</b>	<b>0.1868</b>
<b>Free Met+Thr+Ile</b>	<b>AK-HSDHs+CGS1</b>	<b>-0.4201</b>	<b>0.2267</b>
Free Met+Thr+Ile	<i>AK-HSDHs+TS1</i>	-0.0224	0.9509
Free Met+Thr+Ile	<i>AK-HSDHs+TS1+TD1</i>	-0.0134	0.9707

Free Met+Thr+Ile	<i>AK-HSDHs+TSI+THAs</i>	-0.0102	0.9776
<b>Free Met+Thr+Ile</b>	<b>AKs</b>	<b>0.6093</b>	<b>0.0615</b>
<b>Free Met+Thr+Ile</b>	<b>AKs/AK-HSDHs</b>	<b>0.6431</b>	<b>0.0449</b>
<b>Free Met+Thr+Ile</b>	<b>AKs+AK-HSDHs</b>	<b>0.5133</b>	<b>0.1292</b>
<b>Free Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+CGSI</b>	<b>0.4172</b>	<b>0.2303</b>
<b>Free Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+DHDPSs</b>	<b>0.5146</b>	<b>0.1280</b>
<b>Free Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+TSI</b>	<b>0.4834</b>	<b>0.1570</b>
<b>Free Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+TSI+TDI</b>	<b>0.4725</b>	<b>0.1679</b>
<b>Free Met+Thr+Ile</b>	<b>AKs+AK-HSDHs+TSI+THAs</b>	<b>0.4887</b>	<b>0.1517</b>
<b>Free Met+Thr+Ile</b>	<b>AKs+DHDPSs</b>	<b>0.6123</b>	<b>0.0599</b>
Free Met+Thr+Ile	<i>BCAT1</i>	0.0132	0.9712
Free Met+Thr+Ile	Biosynthetic genes analyzed	0.3896	0.2658
Free Met+Thr+Ile	Catabolic genes analyzed	-0.3126	0.3792
Free Met+Thr+Ile	<i>CGSI</i>	-0.2973	0.4042
Free Met+Thr+Ile	<i>CGSI/SAMSs</i>	0.1617	0.6553
<b>Free Met+Thr+Ile</b>	<b>CGSI/TSI</b>	<b>-0.4065</b>	<b>0.2437</b>
<b>Free Met+Thr+Ile</b>	<b>DHDPS1</b>	<b>0.5439</b>	<b>0.1041</b>
Free Met+Thr+Ile	<i>DHDPS2</i>	-0.2538	0.4792
Free Met+Thr+Ile	<i>DHDPSs</i>	0.1615	0.6558
<b>Free Met+Thr+Ile</b>	<b>DHDPSs/AK-HSDHs</b>	<b>0.5615</b>	<b>0.0912</b>
<b>Free Met+Thr+Ile</b>	<b>DHDPSs/LKR-SDHI</b>	<b>-0.4914</b>	<b>0.1492</b>
Free Met+Thr+Ile	Free Ala	-0.1875	0.6039
Free Met+Thr+Ile	Free Arg	-0.0729	0.8414
Free Met+Thr+Ile	Free Asn	0.0045	0.9901
Free Met+Thr+Ile	Free Asn+Asp	-0.0914	0.8017
<b>Free Met+Thr+Ile</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>0.8777</b>	<b>0.0008</b>
<b>Free Met+Thr+Ile</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>0.8813</b>	<b>0.0008</b>
Free Met+Thr+Ile	Free Asp	-0.1022	0.7788
<b>Free Met+Thr+Ile</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>0.9034</b>	<b>0.0003</b>
<b>Free Met+Thr+Ile</b>	<b>Free Cys</b>	<b>0.8536</b>	<b>0.0017</b>
Free Met+Thr+Ile	Free Gln	-0.0751	0.8367
Free Met+Thr+Ile	Free Glu	0.1940	0.5913
Free Met+Thr+Ile	Free Gly	-0.1141	0.7537
Free Met+Thr+Ile	Free His	-0.0436	0.9049
<b>Free Met+Thr+Ile</b>	<b>Free Ile</b>	<b>0.4764</b>	<b>0.1639</b>
Free Met+Thr+Ile	Free Leu	-0.1521	0.6748
Free Met+Thr+Ile	Free Lys	-0.0561	0.8777
<b>Free Met+Thr+Ile</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>0.9993</b>	<b>&lt;.0001</b>
Free Met+Thr+Ile	Free Met	-0.1507	0.6777
Free Met+Thr+Ile	Free Phe	-0.2886	0.4187
Free Met+Thr+Ile	Free Pro	-0.1322	0.7158
<b>Free Met+Thr+Ile</b>	<b>Free Ser</b>	<b>-0.4866</b>	<b>0.1538</b>
<b>Free Met+Thr+Ile</b>	<b>Free Thr</b>	<b>0.9998</b>	<b>&lt;.0001</b>
Free Met+Thr+Ile	Free Trp	-0.3712	0.2909
Free Met+Thr+Ile	Free Tyr	-0.3079	0.3867
Free Met+Thr+Ile	Free Val	-0.2545	0.4780
Free Met+Thr+Ile	HSDH activity with four effectors	-0.3198	0.3677
Free Met+Thr+Ile	HSDH activity without effectors	-0.1787	0.6212
<b>Free Met+Thr+Ile</b>	<b>LKR-SDHI</b>	<b>0.6434</b>	<b>0.0448</b>
<b>Free Met+Thr+Ile</b>	<b>Lys-sensitive AK activity</b>	<b>0.5246</b>	<b>0.1195</b>
<b>Free Met+Thr+Ile</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.6053</b>	<b>0.0637</b>
Free Met+Thr+Ile	<i>SAMS1</i>	-0.2381	0.5077
Free Met+Thr+Ile	<i>SAMS2</i>	0.3865	0.2700
Free Met+Thr+Ile	<i>SAMS3</i>	-0.2636	0.4617
Free Met+Thr+Ile	<i>SAMS4</i>	-0.2996	0.4004
Free Met+Thr+Ile	<i>SAMSs</i>	-0.3177	0.3711
Free Met+Thr+Ile	<i>TDI</i>	0.0389	0.9151
Free Met+Thr+Ile	<i>TDI/BCAT1</i>	-0.1325	0.7151

Free Met+Thr+Ile	<i>THA1</i>	0.1735	0.6316
<b>Free Met+Thr+Ile</b>	<b><i>THA2</i></b>	<b>0.5228</b>	<b>0.1210</b>
<b>Free Met+Thr+Ile</b>	<b><i>THAs</i></b>	<b>0.6047</b>	<b>0.0640</b>
Free Met+Thr+Ile	<i>THAs+TD1</i>	0.1554	0.6682
<b>Free Met+Thr+Ile</b>	<b>Thr-sensitive AK activity</b>	<b>-0.5457</b>	<b>0.1027</b>
Free Met+Thr+Ile	Total free AAs	0.1910	0.5970
Free Met+Thr+Ile	<i>TS1</i>	0.1719	0.6348
Free Met+Thr+Ile	<i>TS1/(THAs+TD1)</i>	-0.1609	0.6570
Free Met+Thr+Ile	<i>TS1/TD1</i>	-0.2268	0.5286
Free Met+Thr+Ile	<i>TS1/THAs</i>	-0.2427	0.4993
Free Phe	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.0678	0.8524
<b>Free Phe</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.4056</b>	<b>0.2448</b>
<b>Free Phe</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.5614</b>	<b>0.0913</b>
<b>Free Phe</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>-0.4339</b>	<b>0.2103</b>
Free Phe	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.3294	0.3527
Free Phe	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.1340	0.7120
<b>Free Phe</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.5969</b>	<b>0.0685</b>
<b>Free Phe</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.5478</b>	<b>0.1012</b>
Free Phe	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.0118	0.9742
Free Phe	AK activity with four effectors	-0.0641	0.8603
Free Phe	AK activity without effectors	-0.1549	0.6692
Free Phe	AK activity/HSDH activity with four effectors	-0.3893	0.2662
Free Phe	AK activity/HSDH activity without effectors	-0.2978	0.4033
Free Phe	<i>AK1</i>	-0.2680	0.4540
Free Phe	<i>AK1+AK2</i>	-0.2003	0.5790
Free Phe	<i>AK1+AK3</i>	-0.0799	0.8263
Free Phe	<i>AK2</i>	-0.1367	0.7065
Free Phe	<i>AK2+AK3</i>	-0.0971	0.7896
Free Phe	<i>AK3</i>	0.2133	0.5541
Free Phe	<i>AK-HSDH1</i>	0.2352	0.5131
<b>Free Phe</b>	<b><i>AK-HSDH2</i></b>	<b>0.7088</b>	<b>0.0217</b>
<b>Free Phe</b>	<b><i>AK-HSDHs</i></b>	<b>0.5961</b>	<b>0.0689</b>
<b>Free Phe</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>0.7150</b>	<b>0.0201</b>
<b>Free Phe</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.7053</b>	<b>0.0227</b>
<b>Free Phe</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>0.7407</b>	<b>0.0143</b>
<b>Free Phe</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>0.7040</b>	<b>0.0231</b>
Free Phe	<i>AKs</i>	-0.1588	0.6613
<b>Free Phe</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>-0.4339</b>	<b>0.2103</b>
Free Phe	<i>AKs+AK-HSDHs</i>	-0.0072	0.9842
Free Phe	<i>AKs+AK-HSDHs+CGS1</i>	0.1536	0.6718
Free Phe	<i>AKs+AK-HSDHs+DHDPSs</i>	0.0239	0.9478
Free Phe	<i>AKs+AK-HSDHs+TS1</i>	0.3052	0.3911
Free Phe	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.3514	0.3194
Free Phe	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.3019	0.3965
Free Phe	<i>AKs+DHDPSs</i>	-0.1256	0.7296
<b>Free Phe</b>	<b><i>BCAT1</i></b>	<b>-0.7791</b>	<b>0.0079</b>
<b>Free Phe</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4189</b>	<b>0.2282</b>
<b>Free Phe</b>	<b>Catabolic genes analyzed</b>	<b>0.6534</b>	<b>0.0405</b>
<b>Free Phe</b>	<b><i>CGS1</i></b>	<b>0.7047</b>	<b>0.0229</b>
Free Phe	<i>CGS1/SAMSs</i>	-0.2705	0.4498
Free Phe	<i>CGS1/TS1</i>	-0.1641	0.6505
<b>Free Phe</b>	<b><i>DHDPS1</i></b>	<b>0.4303</b>	<b>0.2145</b>
<b>Free Phe</b>	<b><i>DHDPS2</i></b>	<b>0.8020</b>	<b>0.0053</b>
<b>Free Phe</b>	<b><i>DHDPSs</i></b>	<b>0.8031</b>	<b>0.0051</b>
<b>Free Phe</b>	<b><i>DHDPSs/AK-HSDHs</i></b>	<b>-0.4082</b>	<b>0.2415</b>
<b>Free Phe</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>0.6430</b>	<b>0.0449</b>
<b>Free Phe</b>	<b>Free Ala</b>	<b>0.9185</b>	<b>0.0002</b>



<b>Free Phe</b>	<b>Free Arg</b>	<b>0.7635</b>	<b>0.0102</b>
<b>Free Phe</b>	<b>Free Asn</b>	<b>0.8327</b>	<b>0.0028</b>
<b>Free Phe</b>	<b>Free Asp</b>	<b>0.6682</b>	<b>0.0347</b>
Free Phe	Free Cys	-0.0421	0.9081
<b>Free Phe</b>	<b>Free Gln</b>	<b>0.7998</b>	<b>0.0055</b>
<b>Free Phe</b>	<b>Free Glu</b>	<b>0.4322</b>	<b>0.2122</b>
<b>Free Phe</b>	<b>Free Gly</b>	<b>0.6208</b>	<b>0.0555</b>
<b>Free Phe</b>	<b>Free His</b>	<b>0.8886</b>	<b>0.0006</b>
<b>Free Phe</b>	<b>Free Ile</b>	<b>0.5514</b>	<b>0.0985</b>
<b>Free Phe</b>	<b>Free Leu</b>	<b>0.9570</b>	<b>&lt;.0001</b>
<b>Free Phe</b>	<b>Free Lys</b>	<b>0.8811</b>	<b>0.0008</b>
<b>Free Phe</b>	<b>Free Met</b>	<b>0.6286</b>	<b>0.0516</b>
<b>Free Phe</b>	<b>HSDH activity with four effectors</b>	<b>0.6182</b>	<b>0.0568</b>
Free Phe	HSDH activity without effectors	0.3348	0.3443
Free Phe	<i>LKR-SDHI</i>	-0.2858	0.4235
<b>Free Phe</b>	<b>Lys-sensitive AK activity</b>	<b>-0.5520</b>	<b>0.0980</b>
Free Phe	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.3018	0.3967
<b>Free Phe</b>	<b>SAMS1</b>	<b>0.8246</b>	<b>0.0033</b>
<b>Free Phe</b>	<b>SAMS2</b>	<b>0.7139</b>	<b>0.0204</b>
Free Phe	<i>SAMS3</i>	0.2963	0.4058
<b>Free Phe</b>	<b>SAMS4</b>	<b>0.7362</b>	<b>0.0152</b>
<b>Free Phe</b>	<b>SAMSs</b>	<b>0.6524</b>	<b>0.0409</b>
<b>Free Phe</b>	<b>TD1</b>	<b>0.8891</b>	<b>0.0006</b>
<b>Free Phe</b>	<b>TD1/BCAT1</b>	<b>0.6120</b>	<b>0.0600</b>
Free Phe	<i>THA1</i>	-0.3331	0.3469
Free Phe	<i>THA2</i>	0.0849	0.8157
Free Phe	<i>THAs</i>	0.0284	0.9380
<b>Free Phe</b>	<b>THAs+TD1</b>	<b>0.8679</b>	<b>0.0011</b>
Free Phe	Thr-sensitive AK activity	0.2654	0.4586
<b>Free Phe</b>	<b>TS1</b>	<b>0.6594</b>	<b>0.0380</b>
<b>Free Phe</b>	<b>TS1/(THAs+TD1)</b>	<b>-0.5565</b>	<b>0.0948</b>
<b>Free Phe</b>	<b>TS1/TD1</b>	<b>-0.5735</b>	<b>0.0830</b>
<b>Free Phe</b>	<b>TS1/THAs</b>	<b>0.6268</b>	<b>0.0525</b>
Free Pro	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.3673	0.2965
<b>Free Pro</b>	<b>(AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.5963</b>	<b>0.0688</b>
<b>Free Pro</b>	<b>(AK-HSDHs+TS1+TD1)/BCAT1</b>	<b>0.4366</b>	<b>0.2071</b>
Free Pro	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.1047	0.7734
Free Pro	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.1485	0.6823
Free Pro	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.0163	0.9644
<b>Free Pro</b>	<b>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.5770</b>	<b>0.0808</b>
<b>Free Pro</b>	<b>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</b>	<b>0.4431</b>	<b>0.1997</b>
Free Pro	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0216	0.9527
Free Pro	AK activity with four effectors	-0.1933	0.5926
<b>Free Pro</b>	<b>AK activity without effectors</b>	<b>-0.4645</b>	<b>0.1762</b>
Free Pro	AK activity/HSDH activity with four effectors	-0.1549	0.6692
Free Pro	AK activity/HSDH activity without effectors	-0.0372	0.9188
Free Pro	<i>AK1</i>	0.1905	0.5981
Free Pro	<i>AK1+AK2</i>	0.0322	0.9296
Free Pro	<i>AK1+AK3</i>	0.3484	0.3238
Free Pro	<i>AK2</i>	-0.0075	0.9837
Free Pro	<i>AK2+AK3</i>	0.0310	0.9322
Free Pro	<i>AK3</i>	0.2208	0.5398
Free Pro	<i>AK-HSDH1</i>	-0.2488	0.4881
<b>Free Pro</b>	<b>AK-HSDH2</b>	<b>0.6595</b>	<b>0.0380</b>
Free Pro	<i>AK-HSDHs</i>	0.2903	0.4158
Free Pro	<i>AK-HSDHs+CGS1</i>	0.3103	0.3828
Free Pro	<i>AK-HSDHs+TS1</i>	0.2497	0.4866
Free Pro	<i>AK-HSDHs+TS1+TD1</i>	0.3039	0.3933

Free Pro	<i>AK-HSDHs+TSI+THAs</i>	0.2440	0.4969
Free Pro	<i>AKs</i>	0.0723	0.8427
Free Pro	<i>AKs/AK-HSDHs</i>	-0.1047	0.7734
Free Pro	<i>AKs+AK-HSDHs</i>	0.1527	0.6737
Free Pro	<i>AKs+AK-HSDHs+CGSI</i>	0.2053	0.5693
Free Pro	<i>AKs+AK-HSDHs+DHDPSs</i>	0.1799	0.6189
Free Pro	<i>AKs+AK-HSDHs+TSI</i>	0.2123	0.5561
Free Pro	<i>AKs+AK-HSDHs+TSI+TDI</i>	0.2533	0.4801
Free Pro	<i>AKs+AK-HSDHs+TSI+THAs</i>	0.2075	0.5652
Free Pro	<i>AKs+DHDPSs</i>	0.1018	0.7795
<b>Free Pro</b>	<b><i>BCATI</i></b>	<b>-0.9053</b>	<b>0.0003</b>
Free Pro	Biosynthetic genes analyzed	0.2595	0.4691
<b>Free Pro</b>	<b>Catabolic genes analyzed</b>	<b>0.4953</b>	<b>0.1455</b>
Free Pro	<i>CGSI</i>	0.2757	0.4406
Free Pro	<i>CGSI/SAMSs</i>	-0.3682	0.2952
Free Pro	<i>CGSI/TSI</i>	0.0598	0.8696
<b>Free Pro</b>	<b><i>DHDPS1</i></b>	<b>0.4681</b>	<b>0.1724</b>
<b>Free Pro</b>	<b><i>DHDPS2</i></b>	<b>0.6440</b>	<b>0.0445</b>
<b>Free Pro</b>	<b><i>DHDPSs</i></b>	<b>0.7403</b>	<b>0.0144</b>
Free Pro	<i>DHDPSs/AK-HSDHs</i>	-0.0992	0.7852
Free Pro	<i>DHDPSs/LKR-SDHI</i>	0.3721	0.2897
<b>Free Pro</b>	<b>Free Ala</b>	<b>0.7496</b>	<b>0.0125</b>
<b>Free Pro</b>	<b>Free Arg</b>	<b>0.6900</b>	<b>0.0272</b>
<b>Free Pro</b>	<b>Free Asn</b>	<b>0.9412</b>	<b>&lt;.0001</b>
<b>Free Pro</b>	<b>Free Asp</b>	<b>0.9332</b>	<b>&lt;.0001</b>
Free Pro	Free Cys	0.2949	0.4081
<b>Free Pro</b>	<b>Free Gln</b>	<b>0.9608</b>	<b>&lt;.0001</b>
<b>Free Pro</b>	<b>Free Glu</b>	<b>0.8370</b>	<b>0.0025</b>
<b>Free Pro</b>	<b>Free Gly</b>	<b>0.8546</b>	<b>0.0016</b>
<b>Free Pro</b>	<b>Free His</b>	<b>0.8222</b>	<b>0.0035</b>
Free Pro	Free Ile	0.1855	0.6078
<b>Free Pro</b>	<b>Free Leu</b>	<b>0.7892</b>	<b>0.0066</b>
<b>Free Pro</b>	<b>Free Lys</b>	<b>0.7992</b>	<b>0.0055</b>
<b>Free Pro</b>	<b>Free Met</b>	<b>0.7037</b>	<b>0.0232</b>
<b>Free Pro</b>	<b>Free Phe</b>	<b>0.7225</b>	<b>0.0183</b>
Free Pro	HSDH activity with four effectors	0.2111	0.5582
Free Pro	HSDH activity without effectors	-0.1551	0.6688
Free Pro	<i>LKR-SDHI</i>	-0.1126	0.7569
<b>Free Pro</b>	<b>Lys-sensitive AK activity</b>	<b>-0.6167</b>	<b>0.0575</b>
Free Pro	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.1954	0.5885
<b>Free Pro</b>	<b><i>SAMS1</i></b>	<b>0.7797</b>	<b>0.0078</b>
<b>Free Pro</b>	<b><i>SAMS2</i></b>	<b>0.5745</b>	<b>0.0824</b>
Free Pro	<i>SAMS3</i>	0.1794	0.6199
<b>Free Pro</b>	<b><i>SAMS4</i></b>	<b>0.4503</b>	<b>0.1916</b>
<b>Free Pro</b>	<b><i>SAMSs</i></b>	<b>0.4967</b>	<b>0.1442</b>
<b>Free Pro</b>	<b><i>TDI</i></b>	<b>0.7516</b>	<b>0.0122</b>
<b>Free Pro</b>	<b><i>TDI/BCATI</i></b>	<b>0.4981</b>	<b>0.1429</b>
Free Pro	<i>THA1</i>	-0.3332	0.3469
Free Pro	<i>THA2</i>	-0.1832	0.6124
Free Pro	<i>THAs</i>	-0.1718	0.6352
<b>Free Pro</b>	<b><i>THAs+TDI</i></b>	<b>0.6838</b>	<b>0.0292</b>
Free Pro	Thr-sensitive AK activity	-0.1549	0.6691
Free Pro	<i>TSI</i>	0.1975	0.5844
<b>Free Pro</b>	<b><i>TSI/(THAs+TDI)</i></b>	<b>-0.7591</b>	<b>0.0109</b>
<b>Free Pro</b>	<b><i>TSI/TDI</i></b>	<b>-0.6815</b>	<b>0.0300</b>
<b>Free Pro</b>	<b><i>TSI/THAs</i></b>	<b>0.5489</b>	<b>0.1004</b>
<b>Free Ser</b>	<b><i>(AK-HSDHs+CGSI)/SAMSs</i></b>	<b>-0.5337</b>	<b>0.1121</b>
Free Ser	<i>(AK-HSDHs+TSI)/(THAs+TDI)</i>	-0.2137	0.5533

Free Ser	$(AK-HSDHs+TS1+TD1)/BCAT1$	0.0521	0.8863
<b>Free Ser</b>	$(AKs+AK-HSDHs)/AK-HSDHs$	<b>-0.5988</b>	<b>0.0674</b>
<b>Free Ser</b>	$(AKs+AK-HSDHs+CGS1)/SAMSs$	<b>-0.6557</b>	<b>0.0395</b>
Free Ser	$(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI$	-0.0582	0.8731
<b>Free Ser</b>	$(AKs+AK-HSDHs+TS1)/(THAs+TD1)$	<b>-0.5073</b>	<b>0.1345</b>
Free Ser	$(AKs+AK-HSDHs+TS1+TD1)/BCAT1$	0.0297	0.9351
Free Ser	$(AKs+DHDPSs)/LKR-SDHI$	-0.2443	0.4963
<b>Free Ser</b>	<b>AK activity with four effectors</b>	<b>-0.4590</b>	<b>0.1820</b>
<b>Free Ser</b>	<b>AK activity without effectors</b>	<b>-0.5850</b>	<b>0.0756</b>
<b>Free Ser</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>-0.5668</b>	<b>0.0875</b>
<b>Free Ser</b>	<b>AK activity/HSDH activity without effectors</b>	<b>-0.5119</b>	<b>0.1304</b>
Free Ser	<i>AK1</i>	0.2521	0.4823
<b>Free Ser</b>	<b><i>AK1+AK2</i></b>	<b>-0.5906</b>	<b>0.0722</b>
<b>Free Ser</b>	<b><i>AK1+AK3</i></b>	<b>0.4363</b>	<b>0.2074</b>
<b>Free Ser</b>	<b><i>AK2</i></b>	<b>-0.6209</b>	<b>0.0554</b>
<b>Free Ser</b>	<b><i>AK2+AK3</i></b>	<b>-0.5579</b>	<b>0.0938</b>
Free Ser	<i>AK3</i>	0.2625	0.4637
Free Ser	<i>AK-HSDH1</i>	0.2837	0.4270
<b>Free Ser</b>	<b><i>AK-HSDH2</i></b>	<b>0.5984</b>	<b>0.0676</b>
<b>Free Ser</b>	<b><i>AK-HSDHs</i></b>	<b>0.5479</b>	<b>0.1011</b>
Free Ser	<i>AK-HSDHs+CGS1</i>	0.3791	0.2800
Free Ser	<i>AK-HSDHs+TS1</i>	0.2452	0.4948
Free Ser	<i>AK-HSDHs+TS1+TD1</i>	0.2800	0.4332
Free Ser	<i>AK-HSDHs+TS1+THAs</i>	0.2304	0.5218
<b>Free Ser</b>	<b><i>AKs</i></b>	<b>-0.5325</b>	<b>0.1130</b>
<b>Free Ser</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>-0.5988</b>	<b>0.0674</b>
<b>Free Ser</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>-0.4072</b>	<b>0.2428</b>
Free Ser	<i>AKs+AK-HSDHs+CGS1</i>	-0.3584	0.3092
Free Ser	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.3842	0.2730
Free Ser	<i>AKs+AK-HSDHs+TS1</i>	-0.2833	0.4277
Free Ser	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.2396	0.5050
Free Ser	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.2915	0.4139
<b>Free Ser</b>	<b><i>AKs+DHDPSs</i></b>	<b>-0.5103</b>	<b>0.1318</b>
<b>Free Ser</b>	<b><i>BCAT1</i></b>	<b>-0.5285</b>	<b>0.1163</b>
Free Ser	Biosynthetic genes analyzed	-0.2209	0.5397
<b>Free Ser</b>	<b>Catabolic genes analyzed</b>	<b>0.6623</b>	<b>0.0369</b>
Free Ser	<i>CGS1</i>	0.1232	0.7345
<b>Free Ser</b>	<b><i>CGS1/SAMSs</i></b>	<b>-0.6635</b>	<b>0.0365</b>
Free Ser	<i>CGS1/TS1</i>	-0.0366	0.9200
Free Ser	<i>DHDPS1</i>	0.2457	0.4939
<b>Free Ser</b>	<b><i>DHDPS2</i></b>	<b>0.4771</b>	<b>0.1632</b>
<b>Free Ser</b>	<b><i>DHDPSs</i></b>	<b>0.4957</b>	<b>0.1452</b>
<b>Free Ser</b>	<b><i>DHDPSs/AK-HSDHs</i></b>	<b>-0.4511</b>	<b>0.1907</b>
<b>Free Ser</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>0.5430</b>	<b>0.1048</b>
<b>Free Ser</b>	<b>Free Ala</b>	<b>0.6682</b>	<b>0.0347</b>
Free Ser	Free Arg	0.3670	0.2968
<b>Free Ser</b>	<b>Free Asn</b>	<b>0.5925</b>	<b>0.0711</b>
<b>Free Ser</b>	<b>Free Asp</b>	<b>0.6977</b>	<b>0.0249</b>
Free Ser	Free Cys	-0.1337	0.7128
<b>Free Ser</b>	<b>Free Gln</b>	<b>0.7087</b>	<b>0.0218</b>
Free Ser	Free Glu	0.3331	0.3470
<b>Free Ser</b>	<b>Free Gly</b>	<b>0.8586</b>	<b>0.0015</b>
<b>Free Ser</b>	<b>Free His</b>	<b>0.4576</b>	<b>0.1836</b>
Free Ser	Free Ile	-0.0629	0.8629
<b>Free Ser</b>	<b>Free Leu</b>	<b>0.4998</b>	<b>0.1413</b>
Free Ser	Free Lys	0.3572	0.3109
Free Ser	Free Met	0.2802	0.4329
<b>Free Ser</b>	<b>Free Phe</b>	<b>0.5961</b>	<b>0.0689</b>

<b>Free Ser</b>	<b>Free Pro</b>	<b>0.6747</b>	<b>0.0323</b>
Free Ser	HSDH activity with four effectors	0.3113	0.3812
Free Ser	HSDH activity without effectors	0.1392	0.7014
Free Ser	<i>LKR-SDHI</i>	-0.3053	0.3911
<b>Free Ser</b>	<b>Lys-sensitive AK activity</b>	<b>-0.8525</b>	<b>0.0017</b>
<b>Free Ser</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.5818</b>	<b>0.0777</b>
Free Ser	<i>SAMS1</i>	<b>0.6991</b>	<b>0.0245</b>
Free Ser	<i>SAMS2</i>	0.3103	0.3829
<b>Free Ser</b>	<b><i>SAMS3</i></b>	<b>0.4282</b>	<b>0.2170</b>
<b>Free Ser</b>	<b><i>SAMS4</i></b>	<b>0.5827</b>	<b>0.0771</b>
<b>Free Ser</b>	<b><i>SAMSs</i></b>	<b>0.6650</b>	<b>0.0359</b>
<b>Free Ser</b>	<b><i>TD1</i></b>	<b>0.5618</b>	<b>0.0910</b>
Free Ser	<i>TD1/BCAT1</i>	0.1183	0.7449
Free Ser	<i>THA1</i>	-0.1520	0.6750
<b>Free Ser</b>	<b><i>THA2</i></b>	<b>-0.6183</b>	<b>0.0567</b>
<b>Free Ser</b>	<b><i>THAs</i></b>	<b>-0.6722</b>	<b>0.0332</b>
<b>Free Ser</b>	<b><i>THAs+TD1</i></b>	<b>0.4134</b>	<b>0.2351</b>
Free Ser	Thr-sensitive AK activity	0.2324	0.5183
Free Ser	<i>TS1</i>	0.0766	0.8333
<b>Free Ser</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.4093</b>	<b>0.2402</b>
Free Ser	<i>TS1/TD1</i>	-0.3213	0.3653
<b>Free Ser</b>	<b><i>TS1/THAs</i></b>	<b>0.8501</b>	<b>0.0018</b>
Free Thr	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.1176	0.7464
Free Thr	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.2483	0.4891
Free Thr	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1395	0.7007
<b>Free Thr</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>0.6460</b>	<b>0.0436</b>
<b>Free Thr</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.5686</b>	<b>0.0863</b>
Free Thr	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.2163	0.5484
Free Thr	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0477	0.8959
Free Thr	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1191	0.7432
Free Thr	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0728	0.8415
Free Thr	AK activity with four effectors	0.2443	0.4963
Free Thr	AK activity without effectors	0.3615	0.3047
<b>Free Thr</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.4632</b>	<b>0.1776</b>
Free Thr	AK activity/HSDH activity without effectors	0.3881	0.2678
Free Thr	<i>AK1</i>	0.0579	0.8738
<b>Free Thr</b>	<b><i>AK1+AK2</i></b>	<b>0.6184</b>	<b>0.0567</b>
Free Thr	<i>AK1+AK3</i>	0.0701	0.8473
<b>Free Thr</b>	<b><i>AK2</i></b>	<b>0.5832</b>	<b>0.0768</b>
<b>Free Thr</b>	<b><i>AK2+AK3</i></b>	<b>0.5694</b>	<b>0.0858</b>
Free Thr	<i>AK3</i>	0.0068	0.9852
Free Thr	<i>AK-HSDH1</i>	-0.2733	0.4449
<b>Free Thr</b>	<b><i>AK-HSDH2</i></b>	<b>-0.4690</b>	<b>0.1715</b>
<b>Free Thr</b>	<b><i>AK-HSDHs</i></b>	<b>-0.4593</b>	<b>0.1818</b>
<b>Free Thr</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>-0.4296</b>	<b>0.2153</b>
Free Thr	<i>AK-HSDHs+TS1</i>	-0.0322	0.9297
Free Thr	<i>AK-HSDHs+TS1+TD1</i>	-0.0240	0.9476
Free Thr	<i>AK-HSDHs+TS1+THAs</i>	-0.0201	0.9561
<b>Free Thr</b>	<b><i>AKs</i></b>	<b>0.6097</b>	<b>0.0613</b>
<b>Free Thr</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>0.6460</b>	<b>0.0436</b>
<b>Free Thr</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.5124</b>	<b>0.1299</b>
<b>Free Thr</b>	<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b>0.4134</b>	<b>0.2350</b>
<b>Free Thr</b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>0.5131</b>	<b>0.1293</b>
<b>Free Thr</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>0.4777</b>	<b>0.1626</b>
<b>Free Thr</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>0.4659</b>	<b>0.1747</b>
<b>Free Thr</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>0.4830</b>	<b>0.1573</b>
<b>Free Thr</b>	<b><i>AKs+DHDPSs</i></b>	<b>0.6120</b>	<b>0.0600</b>

Free Thr	<i>BCAT1</i>	0.0304	0.9336
Free Thr	Biosynthetic genes analyzed	0.3818	0.2763
Free Thr	Catabolic genes analyzed	-0.3212	0.3656
Free Thr	<i>CGS1</i>	-0.3102	0.3831
Free Thr	<i>CGS1/SAMSs</i>	0.1615	0.6558
<b>Free Thr</b>	<b><i>CGS1/TS1</i></b>	<b>-0.4054</b>	<b>0.2451</b>
<b>Free Thr</b>	<b><i>DHDPS1</i></b>	<b>0.5316</b>	<b>0.1138</b>
Free Thr	<i>DHDPS2</i>	-0.2656	0.4583
Free Thr	<i>DHDPSs</i>	0.1463	0.6867
<b>Free Thr</b>	<b><i>DHDPSs/AK-HSDHs</i></b>	<b>0.5634</b>	<b>0.0899</b>
<b>Free Thr</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>-0.4984</b>	<b>0.1426</b>
Free Thr	Free Ala	-0.2035	0.5729
Free Thr	Free Arg	-0.0869	0.8113
Free Thr	Free Asn	-0.0109	0.9761
Free Thr	Free Asp	-0.1148	0.7523
<b>Free Thr</b>	<b>Free Cys</b>	<b>0.8476</b>	<b>0.0020</b>
Free Thr	Free Gln	-0.0898	0.8051
Free Thr	Free Glu	0.1861	0.6067
Free Thr	Free Gly	-0.1251	0.7305
Free Thr	Free His	-0.0599	0.8695
<b>Free Thr</b>	<b>Free Ile</b>	<b>0.4603</b>	<b>0.1807</b>
Free Thr	Free Leu	-0.1717	0.6353
Free Thr	Free Lys	-0.0759	0.8350
Free Thr	Free Met	-0.1667	0.6454
Free Thr	Free Phe	-0.3066	0.3889
Free Thr	Free Pro	-0.1459	0.6876
<b>Free Thr</b>	<b>Free Ser</b>	<b>-0.4938</b>	<b>0.1469</b>
Free Thr	HSDH activity with four effectors	-0.3306	0.3508
Free Thr	HSDH activity without effectors	-0.1861	0.6067
<b>Free Thr</b>	<b><i>LKR-SDHI</i></b>	<b>0.6443</b>	<b>0.0443</b>
<b>Free Thr</b>	<b>Lys-sensitive AK activity</b>	<b>0.5327</b>	<b>0.1129</b>
<b>Free Thr</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.6063</b>	<b>0.0631</b>
Free Thr	<i>SAMS1</i>	-0.2530	0.4806
Free Thr	<i>SAMS2</i>	0.3718	0.2901
Free Thr	<i>SAMS3</i>	-0.2654	0.4586
Free Thr	<i>SAMS4</i>	-0.3088	0.3854
Free Thr	<i>SAMSs</i>	-0.3262	0.3577
Free Thr	<i>TD1</i>	0.0229	0.9499
Free Thr	<i>TD1/BCAT1</i>	-0.1493	0.6805
Free Thr	<i>THA1</i>	0.1780	0.6228
<b>Free Thr</b>	<b><i>THA2</i></b>	<b>0.5148</b>	<b>0.1279</b>
<b>Free Thr</b>	<b><i>THAs</i></b>	<b>0.5977</b>	<b>0.0680</b>
Free Thr	<i>THAs+TD1</i>	0.1385	0.7028
<b>Free Thr</b>	<b>Thr-sensitive AK activity</b>	<b>-0.5430</b>	<b>0.1048</b>
Free Thr	<i>TS1</i>	0.1613	0.6562
Free Thr	<i>TS1/(THAs+TD1)</i>	-0.1462	0.6870
Free Thr	<i>TS1/TD1</i>	-0.2107	0.5591
Free Thr	<i>TS1/THAs</i>	-0.2502	0.4858
Free Thr/(Gly+Ile)	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.0043	0.9905
Free Thr/(Gly+Ile)	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.1644	0.6499
Free Thr/(Gly+Ile)	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.2039	0.5721
<b>Free Thr/(Gly+Ile)</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>0.6651</b>	<b>0.0359</b>
<b>Free Thr/(Gly+Ile)</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.5659</b>	<b>0.0882</b>
Free Thr/(Gly+Ile)	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.2058	0.5684
Free Thr/(Gly+Ile)	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1259	0.7289
Free Thr/(Gly+Ile)	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1853	0.6083
Free Thr/(Gly+Ile)	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0555	0.8790

Free Thr/(Gly+Ile)	AK activity with four effectors	0.3145	0.3762
<b>Free Thr/(Gly+Ile)</b>	<b>AK activity without effectors</b>	<b>0.4782</b>	<b>0.1621</b>
<b>Free Thr/(Gly+Ile)</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.5001</b>	<b>0.1411</b>
<b>Free Thr/(Gly+Ile)</b>	<b>AK activity/HSDH activity without effectors</b>	<b>0.4077</b>	<b>0.2421</b>
Free Thr/(Gly+Ile)	<i>AK1</i>	-0.0099	0.9783
<b>Free Thr/(Gly+Ile)</b>	<b><i>AK1+AK2</i></b>	<b>0.5753</b>	<b>0.0818</b>
Free Thr/(Gly+Ile)	<i>AK1+AK3</i>	-0.0392	0.9144
<b>Free Thr/(Gly+Ile)</b>	<b><i>AK2</i></b>	<b>0.5559</b>	<b>0.0952</b>
<b>Free Thr/(Gly+Ile)</b>	<b><i>AK2+AK3</i></b>	<b>0.5321</b>	<b>0.1134</b>
Free Thr/(Gly+Ile)	<i>AK3</i>	-0.0517	0.8872
Free Thr/(Gly+Ile)	<i>AK-HSDH1</i>	-0.2477	0.4903
<b>Free Thr/(Gly+Ile)</b>	<b><i>AK-HSDH2</i></b>	<b>-0.5856</b>	<b>0.0753</b>
<b>Free Thr/(Gly+Ile)</b>	<b><i>AK-HSDHs</i></b>	<b>-0.5209</b>	<b>0.1227</b>
<b>Free Thr/(Gly+Ile)</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>-0.4458</b>	<b>0.1966</b>
Free Thr/(Gly+Ile)	<i>AK-HSDHs+TS1</i>	-0.1177	0.7462
Free Thr/(Gly+Ile)	<i>AK-HSDHs+TS1+TD1</i>	-0.1190	0.7433
Free Thr/(Gly+Ile)	<i>AK-HSDHs+TS1+THAs</i>	-0.1034	0.7762
<b>Free Thr/(Gly+Ile)</b>	<b><i>AKs</i></b>	<b>0.5566</b>	<b>0.0947</b>
<b>Free Thr/(Gly+Ile)</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>0.6651</b>	<b>0.0359</b>
<b>Free Thr/(Gly+Ile)</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.4410</b>	<b>0.2020</b>
Free Thr/(Gly+Ile)	<i>AKs+AK-HSDHs+CGS1</i>	0.3538	0.3159
<b>Free Thr/(Gly+Ile)</b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>0.4344</b>	<b>0.2097</b>
Free Thr/(Gly+Ile)	<i>AKs+AK-HSDHs+TS1</i>	0.3817	0.2764
Free Thr/(Gly+Ile)	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.3626	0.3032
Free Thr/(Gly+Ile)	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.3891	0.2664
<b>Free Thr/(Gly+Ile)</b>	<b><i>AKs+DHDPSs</i></b>	<b>0.5510</b>	<b>0.0988</b>
Free Thr/(Gly+Ile)	<i>BCAT1</i>	0.1869	0.6052
Free Thr/(Gly+Ile)	Biosynthetic genes analyzed	0.2950	0.4080
Free Thr/(Gly+Ile)	Catabolic genes analyzed	-0.3953	0.2583
Free Thr/(Gly+Ile)	<i>CGS1</i>	-0.2769	0.4386
Free Thr/(Gly+Ile)	<i>CGS1/SAMSs</i>	0.2842	0.4262
Free Thr/(Gly+Ile)	<i>CGS1/TS1</i>	-0.2850	0.4248
Free Thr/(Gly+Ile)	<i>DHDPS1</i>	0.3586	0.3089
Free Thr/(Gly+Ile)	<i>DHDPS2</i>	-0.3988	0.2536
Free Thr/(Gly+Ile)	<i>DHDPSs</i>	-0.0546	0.8809
<b>Free Thr/(Gly+Ile)</b>	<b><i>DHDPSs/AK-HSDHs</i></b>	<b>0.5745</b>	<b>0.0824</b>
<b>Free Thr/(Gly+Ile)</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>-0.5542</b>	<b>0.0964</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>0.9421</b>	<b>&lt;.0001</b>
Free Thr/(Gly+Ile)	Free Ala	-0.3584	0.3092
Free Thr/(Gly+Ile)	Free Arg	-0.1753	0.6281
Free Thr/(Gly+Ile)	Free Asn	-0.1868	0.6052
Free Thr/(Gly+Ile)	Free Asn+Asp	-0.2918	0.4134
<b>Free Thr/(Gly+Ile)</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>0.7494</b>	<b>0.0126</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>0.7537</b>	<b>0.0118</b>
Free Thr/(Gly+Ile)	Free Asp	-0.2991	0.4011
<b>Free Thr/(Gly+Ile)</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>0.7848</b>	<b>0.0072</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Cys</b>	<b>0.7387</b>	<b>0.0147</b>
Free Thr/(Gly+Ile)	Free Gln	-0.2549	0.4773
Free Thr/(Gly+Ile)	Free Glu	0.0032	0.9931
Free Thr/(Gly+Ile)	Free Gly	-0.3137	0.3774
<b>Free Thr/(Gly+Ile)</b>	<b>Free Gly/Thr</b>	<b>-0.8151</b>	<b>0.0041</b>
Free Thr/(Gly+Ile)	Free Gly+Ile	-0.2830	0.4282
Free Thr/(Gly+Ile)	Free His	-0.1815	0.6159
<b>Free Thr/(Gly+Ile)</b>	<b>Free Ile</b>	<b>0.4341</b>	<b>0.2101</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Ile/Thr</b>	<b>-0.8477</b>	<b>0.0020</b>
Free Thr/(Gly+Ile)	Free Leu	-0.3071	0.3881
Free Thr/(Gly+Ile)	Free Lys	-0.1960	0.5874
<b>Free Thr/(Gly+Ile)</b>	<b>Free Lys/(Met+Thr+Ile)</b>	<b>-0.9071</b>	<b>0.0003</b>

Free Thr/(Gly+Ile)	Free Lys/Asp	0.2472	0.4911
<b>Free Thr/(Gly+Ile)</b>	<b>Free Lys/Thr</b>	<b>-0.8664</b>	<b>0.0012</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>0.9584</b>	<b>&lt;.0001</b>
Free Thr/(Gly+Ile)	Free Met	-0.2455	0.4942
<b>Free Thr/(Gly+Ile)</b>	<b>Free Met/(Thr+Ile)</b>	<b>-0.8507</b>	<b>0.0018</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Met/Thr</b>	<b>-0.8140</b>	<b>0.0042</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Met+Thr+Ile</b>	<b>0.9643</b>	<b>&lt;.0001</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Phe</b>	<b>-0.4293</b>	<b>0.2157</b>
Free Thr/(Gly+Ile)	Free Pro	-0.3275	0.3556
<b>Free Thr/(Gly+Ile)</b>	<b>Free Ser</b>	<b>-0.6290</b>	<b>0.0514</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Thr</b>	<b>0.9665</b>	<b>&lt;.0001</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Thr/Asp</b>	<b>0.9465</b>	<b>&lt;.0001</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Free Trp</b>	<b>-0.5008</b>	<b>0.1403</b>
Free Thr/(Gly+Ile)	Free Tyr	-0.3447	0.3294
Free Thr/(Gly+Ile)	Free Val	-0.3622	0.3037
Free Thr/(Gly+Ile)	HSDH activity with four effectors	-0.3361	0.3423
Free Thr/(Gly+Ile)	HSDH activity without effectors	-0.1358	0.7084
<b>Free Thr/(Gly+Ile)</b>	<b>LKR-SDHI</b>	<b>0.5880</b>	<b>0.0738</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Lys-sensitive AK activity</b>	<b>0.6336</b>	<b>0.0492</b>
<b>Free Thr/(Gly+Ile)</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.7250</b>	<b>0.0177</b>
Free Thr/(Gly+Ile)	SAMS1	-0.3771	0.2827
Free Thr/(Gly+Ile)	SAMS2	0.2162	0.5486
Free Thr/(Gly+Ile)	SAMS3	-0.2842	0.4261
Free Thr/(Gly+Ile)	SAMS4	-0.3818	0.2763
<b>Free Thr/(Gly+Ile)</b>	<b>SAMSs</b>	<b>-0.4000</b>	<b>0.2520</b>
Free Thr/(Gly+Ile)	TD1	-0.1389	0.7019
Free Thr/(Gly+Ile)	TD1/BCAT1	-0.2250	0.5321
Free Thr/(Gly+Ile)	THA1	0.1328	0.7146
<b>Free Thr/(Gly+Ile)</b>	<b>THA2</b>	<b>0.6179</b>	<b>0.0569</b>
<b>Free Thr/(Gly+Ile)</b>	<b>THAs</b>	<b>0.6812</b>	<b>0.0301</b>
Free Thr/(Gly+Ile)	THAs+TD1	0.0000	1.0000
<b>Free Thr/(Gly+Ile)</b>	<b>Thr-sensitive AK activity</b>	<b>-0.5617</b>	<b>0.0911</b>
Free Thr/(Gly+Ile)	Total free AAs	-0.0163	0.9645
Free Thr/(Gly+Ile)	TS1	0.0762	0.8342
Free Thr/(Gly+Ile)	TS1/(THAs+TD1)	-0.0353	0.9228
Free Thr/(Gly+Ile)	TS1/TD1	-0.0890	0.8068
<b>Free Thr/(Gly+Ile)</b>	<b>TS1/THAs</b>	<b>-0.4022</b>	<b>0.2493</b>
Free Thr/Asp	(AK-HSDHs+CGS1)/SAMSs	-0.1417	0.6962
Free Thr/Asp	(AK-HSDHs+TS1)/(THAs+TD1)	-0.0389	0.9150
Free Thr/Asp	(AK-HSDHs+TS1+TD1)/BCAT1	-0.2125	0.5557
<b>Free Thr/Asp</b>	<b>(AKs+AK-HSDHs)/AK-HSDHs</b>	<b>0.4972</b>	<b>0.1438</b>
<b>Free Thr/Asp</b>	<b>(AKs+AK-HSDHs+CGS1)/SAMSs</b>	<b>0.4022</b>	<b>0.2492</b>
Free Thr/Asp	(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI	-0.1116	0.7589
Free Thr/Asp	(AKs+AK-HSDHs+TS1)/(THAs+TD1)	0.1817	0.6154
Free Thr/Asp	(AKs+AK-HSDHs+TS1+TD1)/BCAT1	-0.1997	0.5803
Free Thr/Asp	(AKs+DHDPSs)/LKR-SDHI	0.0158	0.9655
<b>Free Thr/Asp</b>	<b>AK activity with four effectors</b>	<b>0.4028</b>	<b>0.2485</b>
<b>Free Thr/Asp</b>	<b>AK activity without effectors</b>	<b>0.5658</b>	<b>0.0882</b>
<b>Free Thr/Asp</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.5760</b>	<b>0.0814</b>
Free Thr/Asp	AK activity/HSDH activity without effectors	0.3952	0.2583
Free Thr/Asp	AK1	0.0472	0.8970
<b>Free Thr/Asp</b>	<b>AK1+AK2</b>	<b>0.5071</b>	<b>0.1347</b>
Free Thr/Asp	AK1+AK3	-0.1203	0.7406
<b>Free Thr/Asp</b>	<b>AK2</b>	<b>0.4783</b>	<b>0.1620</b>
<b>Free Thr/Asp</b>	<b>AK2+AK3</b>	<b>0.4273</b>	<b>0.2180</b>
Free Thr/Asp	AK3	-0.2219	0.5377
Free Thr/Asp	AK-HSDH1	-0.0802	0.8257
<b>Free Thr/Asp</b>	<b>AK-HSDH2</b>	<b>-0.5631</b>	<b>0.0901</b>

<b>Free Thr/Asp</b>	<b>AK-HSDHs</b>	<b>-0.4119</b>	<b>0.2369</b>
Free Thr/Asp	AK-HSDHs+CGSI	-0.3607	0.3059
Free Thr/Asp	AK-HSDHs+TSI	-0.0608	0.8674
Free Thr/Asp	AK-HSDHs+TSI+TDI	-0.0709	0.8456
Free Thr/Asp	AK-HSDHs+TSI+THAs	-0.0495	0.8920
<b>Free Thr/Asp</b>	<b>AKs</b>	<b>0.4585</b>	<b>0.1826</b>
<b>Free Thr/Asp</b>	<b>AKs/AK-HSDHs</b>	<b>0.4972</b>	<b>0.1438</b>
Free Thr/Asp	AKs+AK-HSDHs	0.3679	0.2956
Free Thr/Asp	AKs+AK-HSDHs+CGSI	0.2946	0.4086
Free Thr/Asp	AKs+AK-HSDHs+DHDPSs	0.3614	0.3048
Free Thr/Asp	AKs+AK-HSDHs+TSI	0.3366	0.3415
Free Thr/Asp	AKs+AK-HSDHs+TSI+TDI	0.3162	0.3735
Free Thr/Asp	AKs+AK-HSDHs+TSI+THAs	0.3430	0.3319
<b>Free Thr/Asp</b>	<b>AKs+DHDPSs</b>	<b>0.4528</b>	<b>0.1888</b>
Free Thr/Asp	BCATI	0.3651	0.2996
Free Thr/Asp	Biosynthetic genes analyzed	0.2614	0.4657
Free Thr/Asp	Catabolic genes analyzed	-0.2572	0.4731
Free Thr/Asp	CGSI	-0.2335	0.5163
Free Thr/Asp	CGSI/SAMSs	0.1086	0.7653
Free Thr/Asp	CGSI/TSI	-0.3197	0.3679
Free Thr/Asp	DHDPS1	0.2329	0.5173
Free Thr/Asp	DHDPS2	-0.3236	0.3617
Free Thr/Asp	DHDPSs	-0.0755	0.8357
Free Thr/Asp	DHDPSs/AK-HSDHs	0.3944	0.2594
<b>Free Thr/Asp</b>	<b>DHDPSs/LKR-SDHI</b>	<b>-0.4121</b>	<b>0.2366</b>
<b>Free Thr/Asp</b>	<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>0.9992</b>	<b>&lt;.0001</b>
<b>Free Thr/Asp</b>	<b>Free Ala</b>	<b>-0.4388</b>	<b>0.2046</b>
Free Thr/Asp	Free Arg	-0.3115	0.3810
Free Thr/Asp	Free Asn	-0.3105	0.3825
<b>Free Thr/Asp</b>	<b>Free Asn+Asp</b>	<b>-0.4187</b>	<b>0.2285</b>
<b>Free Thr/Asp</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>0.6277</b>	<b>0.0520</b>
<b>Free Thr/Asp</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>0.6328</b>	<b>0.0496</b>
<b>Free Thr/Asp</b>	<b>Free Asp</b>	<b>-0.4252</b>	<b>0.2206</b>
<b>Free Thr/Asp</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>0.6685</b>	<b>0.0346</b>
<b>Free Thr/Asp</b>	<b>Free Cys</b>	<b>0.7004</b>	<b>0.0241</b>
Free Thr/Asp	Free Gln	-0.3465	0.3267
Free Thr/Asp	Free Glu	-0.1848	0.6092
Free Thr/Asp	Free Gly	-0.3006	0.3986
<b>Free Thr/Asp</b>	<b>Free Gly/Thr</b>	<b>-0.7795</b>	<b>0.0079</b>
Free Thr/Asp	Free Gly+Ile	-0.2761	0.4401
Free Thr/Asp	Free His	-0.2844	0.4257
Free Thr/Asp	Free Ile	0.3396	0.3370
<b>Free Thr/Asp</b>	<b>Free Ile/Thr</b>	<b>-0.8307</b>	<b>0.0029</b>
Free Thr/Asp	Free Leu	-0.3825	0.2753
Free Thr/Asp	Free Lys	-0.3121	0.3800
<b>Free Thr/Asp</b>	<b>Free Lys/(Met+Thr+Ile)</b>	<b>-0.8931</b>	<b>0.0005</b>
Free Thr/Asp	Free Lys/Asp	0.3125	0.3793
<b>Free Thr/Asp</b>	<b>Free Lys/Thr</b>	<b>-0.8555</b>	<b>0.0016</b>
<b>Free Thr/Asp</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>0.8895</b>	<b>0.0006</b>
Free Thr/Asp	Free Met	-0.3352	0.3438
<b>Free Thr/Asp</b>	<b>Free Met/Thr</b>	<b>-0.7955</b>	<b>0.0059</b>
<b>Free Thr/Asp</b>	<b>Free Met+Thr+Ile</b>	<b>0.8997</b>	<b>0.0004</b>
<b>Free Thr/Asp</b>	<b>Free Phe</b>	<b>-0.4884</b>	<b>0.1521</b>
<b>Free Thr/Asp</b>	<b>Free Pro</b>	<b>-0.4279</b>	<b>0.2173</b>
<b>Free Thr/Asp</b>	<b>Free Ser</b>	<b>-0.6212</b>	<b>0.0553</b>
<b>Free Thr/Asp</b>	<b>Free Thr</b>	<b>0.9031</b>	<b>0.0003</b>
<b>Free Thr/Asp</b>	<b>Free Trp</b>	<b>-0.4738</b>	<b>0.1666</b>
<b>Free Thr/Asp</b>	<b>Free Tyr</b>	<b>-0.4170</b>	<b>0.2306</b>



<b>Free Thr/Asp</b>	<b>Free Val</b>	<b>-0.4232</b>	<b>0.2229</b>
Free Thr/Asp	HSDH activity with four effectors	-0.3240	0.3610
Free Thr/Asp	HSDH activity without effectors	-0.0499	0.8910
<b>Free Thr/Asp</b>	<b>LKR-SDHI</b>	<b>0.4121</b>	<b>0.2366</b>
<b>Free Thr/Asp</b>	<b>Lys-sensitive AK activity</b>	<b>0.7047</b>	<b>0.0229</b>
<b>Free Thr/Asp</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>0.5421</b>	<b>0.1055</b>
<b>Free Thr/Asp</b>	<b>SAMS1</b>	<b>-0.4591</b>	<b>0.1819</b>
Free Thr/Asp	SAMS2	0.0847	0.8161
Free Thr/Asp	SAMS3	-0.0752	0.8364
Free Thr/Asp	SAMS4	-0.2720	0.4471
Free Thr/Asp	SAMSs	-0.2619	0.4648
Free Thr/Asp	TD1	-0.1798	0.6191
Free Thr/Asp	TD1/BCAT1	-0.2352	0.5130
Free Thr/Asp	THA1	0.0634	0.8618
<b>Free Thr/Asp</b>	<b>THA2</b>	<b>0.5023</b>	<b>0.1390</b>
<b>Free Thr/Asp</b>	<b>THAs</b>	<b>0.5469</b>	<b>0.1018</b>
Free Thr/Asp	THAs+TD1	-0.0648	0.8588
<b>Free Thr/Asp</b>	<b>Thr-sensitive AK activity</b>	<b>-0.4011</b>	<b>0.2507</b>
Free Thr/Asp	Total free AAs	-0.1563	0.6664
Free Thr/Asp	TS1	0.1024	0.7784
Free Thr/Asp	TS1/(THAs+TD1)	0.0948	0.7944
Free Thr/Asp	TS1/TD1	-0.0074	0.9838
Free Thr/Asp	TS1/THAs	-0.3147	0.3757
Free Trp	(AK-HSDHs+CGS1)/SAMSs	-0.2546	0.4778
Free Trp	(AK-HSDHs+TS1)/(THAs+TD1)	-0.2923	0.4125
<b>Free Trp</b>	<b>(AK-HSDHs+TS1+TD1)/BCAT1</b>	<b>0.5889</b>	<b>0.0733</b>
<b>Free Trp</b>	<b>(AKs+AK-HSDHs)/AK-HSDHs</b>	<b>-0.6419</b>	<b>0.0454</b>
<b>Free Trp</b>	<b>(AKs+AK-HSDHs+CGS1)/SAMSs</b>	<b>-0.5654</b>	<b>0.0885</b>
Free Trp	(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI	0.1565	0.6658
<b>Free Trp</b>	<b>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>-0.5904</b>	<b>0.0723</b>
<b>Free Trp</b>	<b>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</b>	<b>0.5666</b>	<b>0.0877</b>
Free Trp	(AKs+DHDPSs)/LKR-SDHI	-0.0057	0.9876
Free Trp	AK activity with four effectors	-0.0544	0.8813
Free Trp	AK activity without effectors	-0.1662	0.6463
<b>Free Trp</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>-0.4214</b>	<b>0.2252</b>
<b>Free Trp</b>	<b>AK activity/HSDH activity without effectors</b>	<b>-0.4302</b>	<b>0.2146</b>
Free Trp	AK1	-0.0544	0.8813
Free Trp	AK1+AK2	-0.3521	0.3183
Free Trp	AK1+AK3	-0.0576	0.8745
Free Trp	AK2	-0.3274	0.3558
Free Trp	AK2+AK3	-0.3204	0.3668
Free Trp	AK3	-0.0069	0.9848
Free Trp	AK-HSDH1	0.3964	0.2567
<b>Free Trp</b>	<b>AK-HSDH2</b>	<b>0.7273</b>	<b>0.0171</b>
<b>Free Trp</b>	<b>AK-HSDHs</b>	<b>0.6992</b>	<b>0.0244</b>
<b>Free Trp</b>	<b>AK-HSDHs+CGS1</b>	<b>0.7713</b>	<b>0.0090</b>
<b>Free Trp</b>	<b>AK-HSDHs+TS1</b>	<b>0.6990</b>	<b>0.0245</b>
<b>Free Trp</b>	<b>AK-HSDHs+TS1+TD1</b>	<b>0.7281</b>	<b>0.0170</b>
<b>Free Trp</b>	<b>AK-HSDHs+TS1+THAs</b>	<b>0.6940</b>	<b>0.0260</b>
Free Trp	AKs	-0.3478	0.3247
<b>Free Trp</b>	<b>AKs/AK-HSDHs</b>	<b>-0.6419</b>	<b>0.0454</b>
Free Trp	AKs+AK-HSDHs	-0.1761	0.6265
Free Trp	AKs+AK-HSDHs+CGS1	-0.0076	0.9834
Free Trp	AKs+AK-HSDHs+DHDPSs	-0.1442	0.6911
Free Trp	AKs+AK-HSDHs+TS1	0.1472	0.6848
Free Trp	AKs+AK-HSDHs+TS1+TD1	0.1940	0.5912
Free Trp	AKs+AK-HSDHs+TS1+THAs	0.1427	0.6940

Free Trp	<i>AKs+DHDPSs</i>	-0.3146	0.3760
<b>Free Trp</b>	<b><i>BCAT1</i></b>	<b>-0.6595</b>	<b>0.0380</b>
Free Trp	Biosynthetic genes analyzed	0.2747	0.4425
<b>Free Trp</b>	<b>Catabolic genes analyzed</b>	<b>0.8027</b>	<b>0.0052</b>
<b>Free Trp</b>	<b><i>CGS1</i></b>	<b>0.6986</b>	<b>0.0246</b>
<b>Free Trp</b>	<b><i>CGS1/SAMSs</i></b>	<b>-0.4794</b>	<b>0.1609</b>
Free Trp	<i>CGS1/TS1</i>	-0.1728	0.6331
Free Trp	<i>DHDPS1</i>	0.3588	0.3085
<b>Free Trp</b>	<b><i>DHDPS2</i></b>	<b>0.8272</b>	<b>0.0031</b>
<b>Free Trp</b>	<b><i>DHDPSs</i></b>	<b>0.7829</b>	<b>0.0074</b>
<b>Free Trp</b>	<b><i>DHDPSs/AK-HSDHs</i></b>	<b>-0.5705</b>	<b>0.0851</b>
<b>Free Trp</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>0.7727</b>	<b>0.0088</b>
<b>Free Trp</b>	<b>Free Ala</b>	<b>0.8205</b>	<b>0.0036</b>
<b>Free Trp</b>	<b>Free Arg</b>	<b>0.7112</b>	<b>0.0211</b>
<b>Free Trp</b>	<b>Free Asn</b>	<b>0.7661</b>	<b>0.0098</b>
<b>Free Trp</b>	<b>Free Asp</b>	<b>0.6142</b>	<b>0.0589</b>
Free Trp	Free Cys	-0.0341	0.9255
<b>Free Trp</b>	<b>Free Gln</b>	<b>0.7876</b>	<b>0.0068</b>
Free Trp	Free Glu	0.2760	0.4401
<b>Free Trp</b>	<b>Free Gly</b>	<b>0.7156</b>	<b>0.0200</b>
<b>Free Trp</b>	<b>Free His</b>	<b>0.8154</b>	<b>0.0040</b>
<b>Free Trp</b>	<b>Free Ile</b>	<b>0.4466</b>	<b>0.1957</b>
<b>Free Trp</b>	<b>Free Leu</b>	<b>0.9056</b>	<b>0.0003</b>
<b>Free Trp</b>	<b>Free Lys</b>	<b>0.7948</b>	<b>0.0060</b>
<b>Free Trp</b>	<b>Free Met</b>	<b>0.6001</b>	<b>0.0666</b>
<b>Free Trp</b>	<b>Free Phe</b>	<b>0.9406</b>	<b>&lt;.0001</b>
<b>Free Trp</b>	<b>Free Pro</b>	<b>0.6931</b>	<b>0.0263</b>
<b>Free Trp</b>	<b>Free Ser</b>	<b>0.6991</b>	<b>0.0245</b>
Free Trp	Free Thr	-0.3884	0.2673
<b>Free Trp</b>	<b>HSDH activity with four effectors</b>	<b>0.6798</b>	<b>0.0306</b>
<b>Free Trp</b>	<b>HSDH activity without effectors</b>	<b>0.4784</b>	<b>0.1619</b>
<b>Free Trp</b>	<b><i>LKR-SDHI</i></b>	<b>-0.4629</b>	<b>0.1779</b>
<b>Free Trp</b>	<b>Lys-sensitive AK activity</b>	<b>-0.5850</b>	<b>0.0757</b>
<b>Free Trp</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.4320</b>	<b>0.2125</b>
<b>Free Trp</b>	<b><i>SAMS1</i></b>	<b>0.7568</b>	<b>0.0113</b>
<b>Free Trp</b>	<b><i>SAMS2</i></b>	<b>0.5718</b>	<b>0.0842</b>
<b>Free Trp</b>	<b><i>SAMS3</i></b>	<b>0.5248</b>	<b>0.1193</b>
<b>Free Trp</b>	<b><i>SAMS4</i></b>	<b>0.8116</b>	<b>0.0044</b>
<b>Free Trp</b>	<b><i>SAMSs</i></b>	<b>0.8028</b>	<b>0.0052</b>
<b>Free Trp</b>	<b><i>TD1</i></b>	<b>0.8251</b>	<b>0.0033</b>
<b>Free Trp</b>	<b><i>TD1/BCAT1</i></b>	<b>0.6418</b>	<b>0.0455</b>
<b>Free Trp</b>	<b><i>THA1</i></b>	<b>-0.4286</b>	<b>0.2165</b>
Free Trp	<i>THA2</i>	-0.0825	0.8208
Free Trp	<i>THAs</i>	-0.1638	0.6512
<b>Free Trp</b>	<b><i>THAs+TD1</i></b>	<b>0.7706</b>	<b>0.0091</b>
Free Trp	Thr-sensitive AK activity	0.3090	0.3850
<b>Free Trp</b>	<b><i>TS1</i></b>	<b>0.6054</b>	<b>0.0636</b>
<b>Free Trp</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.4501</b>	<b>0.1919</b>
<b>Free Trp</b>	<b><i>TS1/TD1</i></b>	<b>-0.4911</b>	<b>0.1495</b>
<b>Free Trp</b>	<b><i>TS1/THAs</i></b>	<b>0.7678</b>	<b>0.0095</b>
Free Tyr	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.2519	0.4826
Free Tyr	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.3877	0.2684
<b>Free Tyr</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.6061</b>	<b>0.0632</b>
Free Tyr	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.3292	0.3529
Free Tyr	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2367	0.5102
Free Tyr	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.0584	0.8727
<b>Free Tyr</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>-0.5597</b>	<b>0.0925</b>
<b>Free Tyr</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>0.5907</b>	<b>0.0722</b>

Free Tyr	(AKs+DHDPSs)/LKR-SDHI	-0.0334	0.9270
Free Tyr	AK activity with four effectors	-0.0031	0.9933
Free Tyr	AK activity without effectors	0.0115	0.9749
<b>Free Tyr</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>-0.4109</b>	<b>0.2382</b>
Free Tyr	AK activity/HSDH activity without effectors	-0.3248	0.3598
<b>Free Tyr</b>	<b>AK1</b>	<b>-0.4979</b>	<b>0.1431</b>
Free Tyr	AK1+AK2	-0.2164	0.5482
<b>Free Tyr</b>	<b>AK1+AK3</b>	<b>-0.4299</b>	<b>0.2150</b>
Free Tyr	AK2	-0.1044	0.7742
Free Tyr	AK2+AK3	-0.0970	0.7897
Free Tyr	AK3	0.0402	0.9122
Free Tyr	AK-HSDHI	0.2024	0.5749
<b>Free Tyr</b>	<b>AK-HSDH2</b>	<b>0.4549</b>	<b>0.1865</b>
<b>Free Tyr</b>	<b>AK-HSDHs</b>	<b>0.4135</b>	<b>0.2349</b>
<b>Free Tyr</b>	<b>AK-HSDHs+CGSI</b>	<b>0.6624</b>	<b>0.0369</b>
<b>Free Tyr</b>	<b>AK-HSDHs+TSI</b>	<b>0.5606</b>	<b>0.0918</b>
<b>Free Tyr</b>	<b>AK-HSDHs+TSI+TDI</b>	<b>0.5849</b>	<b>0.0757</b>
<b>Free Tyr</b>	<b>AK-HSDHs+TSI+THAs</b>	<b>0.5659</b>	<b>0.0881</b>
Free Tyr	AKs	-0.2066	0.5670
Free Tyr	AKs/AK-HSDHs	-0.3292	0.3529
Free Tyr	AKs+AK-HSDHs	-0.1050	0.7728
Free Tyr	AKs+AK-HSDHs+CGSI	0.0831	0.8194
Free Tyr	AKs+AK-HSDHs+DHDPSs	-0.0846	0.8163
Free Tyr	AKs+AK-HSDHs+TSI	0.1775	0.6236
Free Tyr	AKs+AK-HSDHs+TSI+TDI	0.2131	0.5545
Free Tyr	AKs+AK-HSDHs+TSI+THAs	0.1789	0.6210
Free Tyr	AKs+DHDPSs	-0.1848	0.6094
<b>Free Tyr</b>	<b>BCATI</b>	<b>-0.6411</b>	<b>0.0458</b>
Free Tyr	Biosynthetic genes analyzed	0.3113	0.3813
<b>Free Tyr</b>	<b>Catabolic genes analyzed</b>	<b>0.4459</b>	<b>0.1965</b>
<b>Free Tyr</b>	<b>CGSI</b>	<b>0.7982</b>	<b>0.0056</b>
Free Tyr	CGSI/SAMSs	0.0904	0.8039
Free Tyr	CGSI/TSI	0.0468	0.8979
Free Tyr	DHDPS1	0.2614	0.4657
<b>Free Tyr</b>	<b>DHDPS2</b>	<b>0.5568</b>	<b>0.0945</b>
<b>Free Tyr</b>	<b>DHDPSs</b>	<b>0.5171</b>	<b>0.1259</b>
Free Tyr	DHDPSs/AK-HSDHs	-0.2994	0.4006
<b>Free Tyr</b>	<b>DHDPSs/LKR-SDHI</b>	<b>0.4767</b>	<b>0.1636</b>
<b>Free Tyr</b>	<b>Free Ala</b>	<b>0.7387</b>	<b>0.0147</b>
<b>Free Tyr</b>	<b>Free Arg</b>	<b>0.6713</b>	<b>0.0336</b>
<b>Free Tyr</b>	<b>Free Asn</b>	<b>0.5878</b>	<b>0.0739</b>
<b>Free Tyr</b>	<b>Free Asp</b>	<b>0.4060</b>	<b>0.2443</b>
Free Tyr	Free Cys	-0.1800	0.6188
<b>Free Tyr</b>	<b>Free Gln</b>	<b>0.5473</b>	<b>0.1015</b>
Free Tyr	Free Glu	0.1563	0.6663
Free Tyr	Free Gly	0.2898	0.4167
<b>Free Tyr</b>	<b>Free His</b>	<b>0.7345</b>	<b>0.0155</b>
<b>Free Tyr</b>	<b>Free Ile</b>	<b>0.6628</b>	<b>0.0367</b>
<b>Free Tyr</b>	<b>Free Leu</b>	<b>0.8462</b>	<b>0.0020</b>
<b>Free Tyr</b>	<b>Free Lys</b>	<b>0.8185</b>	<b>0.0038</b>
<b>Free Tyr</b>	<b>Free Met</b>	<b>0.6082</b>	<b>0.0621</b>
<b>Free Tyr</b>	<b>Free Phe</b>	<b>0.8853</b>	<b>0.0007</b>
<b>Free Tyr</b>	<b>Free Pro</b>	<b>0.4549</b>	<b>0.1865</b>
Free Tyr	Free Ser	0.3316	0.3492
Free Tyr	Free Thr	-0.3266	0.3571
<b>Free Tyr</b>	<b>Free Trp</b>	<b>0.8103</b>	<b>0.0045</b>
<b>Free Tyr</b>	<b>HSDH activity with four effectors</b>	<b>0.6614</b>	<b>0.0373</b>
<b>Free Tyr</b>	<b>HSDH activity without effectors</b>	<b>0.4669</b>	<b>0.1737</b>

Free Tyr	<i>LKR-SDHI</i>	-0.2716	0.4478
<b>Free Tyr</b>	<b>Lys-sensitive AK activity</b>	<b>-0.4047</b>	<b>0.2460</b>
Free Tyr	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.0663	0.8556
<b>Free Tyr</b>	<b><i>SAMS1</i></b>	<b>0.6766</b>	<b>0.0317</b>
<b>Free Tyr</b>	<b><i>SAMS2</i></b>	<b>0.5486</b>	<b>0.1006</b>
Free Tyr	<i>SAMS3</i>	0.1324	0.7154
<b>Free Tyr</b>	<b><i>SAMS4</i></b>	<b>0.5489</b>	<b>0.1004</b>
<b>Free Tyr</b>	<b><i>SAMSs</i></b>	<b>0.4449</b>	<b>0.1976</b>
<b>Free Tyr</b>	<b><i>TD1</i></b>	<b>0.6646</b>	<b>0.0360</b>
<b>Free Tyr</b>	<b><i>TD1/BCAT1</i></b>	<b>0.6356</b>	<b>0.0483</b>
Free Tyr	<i>THA1</i>	-0.3073	0.3877
Free Tyr	<i>THA2</i>	0.3871	0.2690
Free Tyr	<i>THAs</i>	0.2984	0.4024
<b>Free Tyr</b>	<b><i>THAs+TD1</i></b>	<b>0.7079</b>	<b>0.0220</b>
Free Tyr	Thr-sensitive AK activity	0.1557	0.6675
<b>Free Tyr</b>	<b><i>TS1</i></b>	<b>0.5507</b>	<b>0.0990</b>
<b>Free Tyr</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.4708</b>	<b>0.1697</b>
<b>Free Tyr</b>	<b><i>TS1/TD1</i></b>	<b>-0.4893</b>	<b>0.1512</b>
Free Tyr	<i>TS1/THAs</i>	0.3094	0.3843
Free Val	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.0163	0.9644
Free Val	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.2082	0.5639
Free Val	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	0.3107	0.3823
<b>Free Val</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>-0.4185</b>	<b>0.2287</b>
Free Val	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2835	0.4273
Free Val	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.2801	0.4332
Free Val	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.3987	0.2538
Free Val	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	0.2987	0.4019
Free Val	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.1566	0.6657
Free Val	AK activity with four effectors	0.0834	0.8187
Free Val	AK activity without effectors	0.0351	0.9233
Free Val	AK activity/HSDH activity with four effectors	-0.2338	0.5156
Free Val	AK activity/HSDH activity without effectors	-0.1232	0.7346
Free Val	<i>AK1</i>	-0.3880	0.2679
Free Val	<i>AK1+AK2</i>	-0.1726	0.6334
Free Val	<i>AK1+AK3</i>	0.0120	0.9738
Free Val	<i>AK2</i>	-0.0855	0.8142
Free Val	<i>AK2+AK3</i>	-0.0028	0.9939
<b>Free Val</b>	<b><i>AK3</i></b>	<b>0.4676</b>	<b>0.1730</b>
Free Val	<i>AK-HSDH1</i>	0.3383	0.3391
<b>Free Val</b>	<b><i>AK-HSDH2</i></b>	<b>0.7135</b>	<b>0.0205</b>
<b>Free Val</b>	<b><i>AK-HSDHs</i></b>	<b>0.6554</b>	<b>0.0397</b>
<b>Free Val</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>0.7552</b>	<b>0.0116</b>
<b>Free Val</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.8259</b>	<b>0.0032</b>
<b>Free Val</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>0.8484</b>	<b>0.0019</b>
<b>Free Val</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>0.8256</b>	<b>0.0033</b>
Free Val	<i>AKs</i>	-0.0853	0.8147
<b>Free Val</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>-0.4185</b>	<b>0.2287</b>
Free Val	<i>AKs+AK-HSDHs</i>	0.0840	0.8176
Free Val	<i>AKs+AK-HSDHs+CGS1</i>	0.2431	0.4986
Free Val	<i>AKs+AK-HSDHs+DHDPSs</i>	0.1110	0.7602
<b>Free Val</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>0.4391</b>	<b>0.2042</b>
<b>Free Val</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>0.4782</b>	<b>0.1621</b>
<b>Free Val</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>0.4359</b>	<b>0.2080</b>
Free Val	<i>AKs+DHDPSs</i>	-0.0560	0.8779
<b>Free Val</b>	<b><i>BCAT1</i></b>	<b>-0.5577</b>	<b>0.0939</b>
<b>Free Val</b>	<b>Biosynthetic genes analyzed</b>	<b>0.5397</b>	<b>0.1073</b>
<b>Free Val</b>	<b>Catabolic genes analyzed</b>	<b>0.6256</b>	<b>0.0531</b>

<b>Free Val</b>	<b>CGS1</b>	<b>0.7168</b>	<b>0.0197</b>
Free Val	CGS1/SAMSs	-0.2757	0.4408
Free Val	CGS1/TS1	-0.2967	0.4052
Free Val	DHDPS1	0.2822	0.4295
<b>Free Val</b>	<b>DHDPS2</b>	<b>0.8103</b>	<b>0.0045</b>
<b>Free Val</b>	<b>DHDPSs</b>	<b>0.7189</b>	<b>0.0191</b>
<b>Free Val</b>	<b>DHDPSs/AK-HSDHs</b>	<b>-0.4452</b>	<b>0.1973</b>
<b>Free Val</b>	<b>DHDPSs/LKR-SDHI</b>	<b>0.6589</b>	<b>0.0383</b>
<b>Free Val</b>	<b>Free Ala</b>	<b>0.8329</b>	<b>0.0028</b>
<b>Free Val</b>	<b>Free Arg</b>	<b>0.6650</b>	<b>0.0359</b>
<b>Free Val</b>	<b>Free Asn</b>	<b>0.6956</b>	<b>0.0255</b>
<b>Free Val</b>	<b>Free Asp</b>	<b>0.4815</b>	<b>0.1588</b>
Free Val	Free Cys	-0.1851	0.6087
<b>Free Val</b>	<b>Free Gln</b>	<b>0.6267</b>	<b>0.0525</b>
Free Val	Free Glu	0.3587	0.3087
<b>Free Val</b>	<b>Free Gly</b>	<b>0.4087</b>	<b>0.2409</b>
<b>Free Val</b>	<b>Free His</b>	<b>0.8109</b>	<b>0.0044</b>
<b>Free Val</b>	<b>Free Ile</b>	<b>0.4851</b>	<b>0.1553</b>
<b>Free Val</b>	<b>Free Leu</b>	<b>0.7893</b>	<b>0.0066</b>
<b>Free Val</b>	<b>Free Lys</b>	<b>0.6871</b>	<b>0.0282</b>
<b>Free Val</b>	<b>Free Met</b>	<b>0.4148</b>	<b>0.2333</b>
<b>Free Val</b>	<b>Free Phe</b>	<b>0.8940</b>	<b>0.0005</b>
<b>Free Val</b>	<b>Free Pro</b>	<b>0.5162</b>	<b>0.1266</b>
<b>Free Val</b>	<b>Free Ser</b>	<b>0.4290</b>	<b>0.2160</b>
Free Val	Free Thr	-0.2665	0.4567
<b>Free Val</b>	<b>Free Trp</b>	<b>0.7758</b>	<b>0.0083</b>
<b>Free Val</b>	<b>Free Tyr</b>	<b>0.7587</b>	<b>0.0110</b>
<b>Free Val</b>	<b>HSDH activity with four effectors</b>	<b>0.5312</b>	<b>0.1141</b>
Free Val	HSDH activity without effectors	0.2526	0.4814
Free Val	LKR-SDHI	-0.3017	0.3969
Free Val	Lys-sensitive AK activity	-0.3723	0.2893
Free Val	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.2517	0.4830
<b>Free Val</b>	<b>SAMS1</b>	<b>0.7020</b>	<b>0.0236</b>
<b>Free Val</b>	<b>SAMS2</b>	<b>0.6903</b>	<b>0.0271</b>
Free Val	SAMS3	0.3024	0.3958
<b>Free Val</b>	<b>SAMS4</b>	<b>0.7865</b>	<b>0.0070</b>
<b>Free Val</b>	<b>SAMSs</b>	<b>0.6229</b>	<b>0.0544</b>
<b>Free Val</b>	<b>TD1</b>	<b>0.8392</b>	<b>0.0024</b>
Free Val	TD1/BCAT1	0.3516	0.3191
Free Val	THA1	-0.3621	0.3039
Free Val	THA2	0.1254	0.7299
Free Val	THAs	0.0843	0.8170
<b>Free Val</b>	<b>THAs+TD1</b>	<b>0.8296</b>	<b>0.0030</b>
<b>Free Val</b>	<b>Thr-sensitive AK activity</b>	<b>0.4867</b>	<b>0.1537</b>
<b>Free Val</b>	<b>TS1</b>	<b>0.7913</b>	<b>0.0064</b>
Free Val	TS1/(THAs+TD1)	-0.3509	0.3202
Free Val	TS1/TD1	-0.3772	0.2826
<b>Free Val</b>	<b>TS1/THAs</b>	<b>0.5504</b>	<b>0.0993</b>
HSDH activity with four effectors	(AK-HSDHs+CGS1)/SAMSs	0.2642	0.4607
HSDH activity with four effectors	(AK-HSDHs+TS1)/(THAs+TD1)	0.3086	0.3857
<b>HSDH activity with four effectors</b>	<b>(AK-HSDHs+TS1+TD1)/BCAT1</b>	<b>0.6336</b>	<b>0.0492</b>
<b>HSDH activity with four effectors</b>	<b>(AKs+AK-HSDHs)/AK-HSDHs</b>	<b>-0.6242</b>	<b>0.0537</b>
HSDH activity with four effectors	(AKs+AK-HSDHs+CGS1)/SAMSs	-0.3205	0.3667
<b>HSDH activity with four effectors</b>	<b>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</b>	<b>0.4993</b>	<b>0.1417</b>
HSDH activity with four effectors	(AKs+AK-HSDHs+TS1)/(THAs+TD1)	0.0478	0.8957
<b>HSDH activity with four effectors</b>	<b>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</b>	<b>0.6102</b>	<b>0.0610</b>
HSDH activity with four effectors	(AKs+DHDPSs)/LKR-SDHI	0.3428	0.3322
HSDH activity with four effectors	AK activity with four effectors	0.3411	0.3348

HSDH activity with four effectors	AK activity without effectors	0.2889	0.4182
HSDH activity with four effectors	AK1	0.0330	0.9279
HSDH activity with four effectors	AK1+AK2	-0.1855	0.6079
HSDH activity with four effectors	AK1+AK3	-0.0889	0.8070
HSDH activity with four effectors	AK2	-0.1853	0.6082
HSDH activity with four effectors	AK2+AK3	-0.2060	0.5679
HSDH activity with four effectors	AK3	-0.1495	0.6802
<b>HSDH activity with four effectors</b>	<b>AK-HSDH1</b>	<b>0.6694</b>	<b>0.0343</b>
<b>HSDH activity with four effectors</b>	<b>AK-HSDH2</b>	<b>0.5993</b>	<b>0.0671</b>
<b>HSDH activity with four effectors</b>	<b>AK-HSDHs</b>	<b>0.7708</b>	<b>0.0091</b>
<b>HSDH activity with four effectors</b>	<b>AK-HSDHs+CGS1</b>	<b>0.8182</b>	<b>0.0038</b>
<b>HSDH activity with four effectors</b>	<b>AK-HSDHs+TS1</b>	<b>0.6756</b>	<b>0.0320</b>
<b>HSDH activity with four effectors</b>	<b>AK-HSDHs+TS1+TD1</b>	<b>0.6601</b>	<b>0.0378</b>
<b>HSDH activity with four effectors</b>	<b>AK-HSDHs+TS1+THAs</b>	<b>0.6748</b>	<b>0.0323</b>
HSDH activity with four effectors	AKs	-0.2098	0.5607
<b>HSDH activity with four effectors</b>	<b>AKs/AK-HSDHs</b>	<b>-0.6242</b>	<b>0.0537</b>
HSDH activity with four effectors	AKs+AK-HSDHs	-0.0145	0.9683
HSDH activity with four effectors	AKs+AK-HSDHs+CGS1	0.1479	0.6835
HSDH activity with four effectors	AKs+AK-HSDHs+DHDPSs	0.0002	0.9996
HSDH activity with four effectors	AKs+AK-HSDHs+TS1	0.2455	0.4941
HSDH activity with four effectors	AKs+AK-HSDHs+TS1+TD1	0.2588	0.4703
HSDH activity with four effectors	AKs+AK-HSDHs+TS1+THAs	0.2431	0.4986
HSDH activity with four effectors	AKs+DHDPSs	-0.1933	0.5927
HSDH activity with four effectors	BCAT1	-0.2190	0.5433
HSDH activity with four effectors	Biosynthetic genes analyzed	0.3533	0.3166
<b>HSDH activity with four effectors</b>	<b>Catabolic genes analyzed</b>	<b>0.5488</b>	<b>0.1004</b>
<b>HSDH activity with four effectors</b>	<b>CGS1</b>	<b>0.7061</b>	<b>0.0225</b>
HSDH activity with four effectors	CGS1/SAMSs	-0.1946	0.5900
HSDH activity with four effectors	CGS1/TS1	-0.1407	0.6982
HSDH activity with four effectors	DHDPS1	0.0906	0.8033
<b>HSDH activity with four effectors</b>	<b>DHDPS2</b>	<b>0.4913</b>	<b>0.1493</b>
HSDH activity with four effectors	DHDPSs	0.3775	0.2821
<b>HSDH activity with four effectors</b>	<b>DHDPSs/AK-HSDHs</b>	<b>-0.7110</b>	<b>0.0212</b>
<b>HSDH activity with four effectors</b>	<b>DHDPSs/LKR-SDHI</b>	<b>0.7180</b>	<b>0.0194</b>
<b>HSDH activity with four effectors</b>	<b>HSDH activity without effectors</b>	<b>0.8670</b>	<b>0.0012</b>
<b>HSDH activity with four effectors</b>	<b>LKR-SDHI</b>	<b>-0.5710</b>	<b>0.0847</b>
HSDH activity with four effectors	SAMS1	0.1347	0.7106
HSDH activity with four effectors	SAMS2	0.1965	0.5864
<b>HSDH activity with four effectors</b>	<b>SAMS3</b>	<b>0.5546</b>	<b>0.0961</b>
<b>HSDH activity with four effectors</b>	<b>SAMS4</b>	<b>0.5460</b>	<b>0.1025</b>
<b>HSDH activity with four effectors</b>	<b>SAMSs</b>	<b>0.5497</b>	<b>0.0997</b>
HSDH activity with four effectors	TD1	0.3397	0.3369
<b>HSDH activity with four effectors</b>	<b>TD1/BCAT1</b>	<b>0.6414</b>	<b>0.0456</b>
<b>HSDH activity with four effectors</b>	<b>THA1</b>	<b>-0.4379</b>	<b>0.2056</b>
HSDH activity with four effectors	THA2	0.1269	0.7269
HSDH activity with four effectors	THAs	0.0077	0.9831
HSDH activity with four effectors	THAs+TD1	0.3418	0.3337
<b>HSDH activity with four effectors</b>	<b>TS1</b>	<b>0.5445</b>	<b>0.1037</b>
HSDH activity with four effectors	TS1/(THAs+TD1)	0.1276	0.7253
HSDH activity with four effectors	TS1/TD1	0.1605	0.6578
<b>HSDH activity with four effectors</b>	<b>TS1/THAs</b>	<b>0.4901</b>	<b>0.1504</b>
HSDH activity without effectors	(AK-HSDHs+CGS1)/SAMSs	0.1789	0.6209
<b>HSDH activity without effectors</b>	<b>(AK-HSDHs+TS1)/(THAs+TD1)</b>	<b>0.4286</b>	<b>0.2165</b>
<b>HSDH activity without effectors</b>	<b>(AK-HSDHs+TS1+TD1)/BCAT1</b>	<b>0.4777</b>	<b>0.1626</b>
<b>HSDH activity without effectors</b>	<b>(AKs+AK-HSDHs)/AK-HSDHs</b>	<b>-0.6654</b>	<b>0.0358</b>
<b>HSDH activity without effectors</b>	<b>(AKs+AK-HSDHs+CGS1)/SAMSs</b>	<b>-0.4408</b>	<b>0.2022</b>
HSDH activity without effectors	(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI	0.2466	0.4922

HSDH activity without effectors	$(AK_s+AK-HSDH_s+TS1)/(THA_s+TD1)$	0.0609	0.8673
<b>HSDH activity without effectors</b>	<b><math>(AK_s+AK-HSDH_s+TS1+TD1)/BCAT1</math></b>	<b>0.4439</b>	<b>0.1988</b>
HSDH activity without effectors	$(AK_s+DHDPS_s)/LKR-SDHI$	0.0831	0.8194
HSDH activity without effectors	AK activity without effectors	0.3383	0.3390
HSDH activity without effectors	AK1	0.0894	0.8060
HSDH activity without effectors	AK1+AK2	-0.3549	0.3143
HSDH activity without effectors	AK1+AK3	-0.2400	0.5042
HSDH activity without effectors	AK2	-0.3609	0.3055
<b>HSDH activity without effectors</b>	<b>AK2+AK3</b>	<b>-0.4216</b>	<b>0.2249</b>
<b>HSDH activity without effectors</b>	<b>AK3</b>	<b>-0.4073</b>	<b>0.2427</b>
<b>HSDH activity without effectors</b>	<b>AK-HSDH1</b>	<b>0.7999</b>	<b>0.0055</b>
HSDH activity without effectors	AK-HSDH2	0.2084	0.5635
<b>HSDH activity without effectors</b>	<b>AK-HSDHs</b>	<b>0.5897</b>	<b>0.0728</b>
<b>HSDH activity without effectors</b>	<b>AK-HSDHs+CGS1</b>	<b>0.6071</b>	<b>0.0627</b>
<b>HSDH activity without effectors</b>	<b>AK-HSDHs+TS1</b>	<b>0.5640</b>	<b>0.0894</b>
<b>HSDH activity without effectors</b>	<b>AK-HSDHs+TS1+TD1</b>	<b>0.5337</b>	<b>0.1121</b>
<b>HSDH activity without effectors</b>	<b>AK-HSDHs+TS1+THAs</b>	<b>0.5650</b>	<b>0.0888</b>
<b>HSDH activity without effectors</b>	<b>AKs</b>	<b>-0.4232</b>	<b>0.2230</b>
<b>HSDH activity without effectors</b>	<b>AKs/AK-HSDHs</b>	<b>-0.6654</b>	<b>0.0358</b>
HSDH activity without effectors	AKs+AK-HSDHs	-0.2839	0.4267
HSDH activity without effectors	AKs+AK-HSDHs+CGS1	-0.1528	0.6735
HSDH activity without effectors	AKs+AK-HSDHs+DHDPSs	-0.2744	0.4430
HSDH activity without effectors	AKs+AK-HSDHs+TS1	0.0035	0.9925
HSDH activity without effectors	AKs+AK-HSDHs+TS1+TD1	0.0086	0.9813
HSDH activity without effectors	AKs+AK-HSDHs+TS1+THAs	0.0031	0.9933
<b>HSDH activity without effectors</b>	<b>AKs+DHDPSs</b>	<b>-0.4139</b>	<b>0.2344</b>
HSDH activity without effectors	BCAT1	0.1060	0.7707
HSDH activity without effectors	Biosynthetic genes analyzed	0.0941	0.7960
<b>HSDH activity without effectors</b>	<b>Catabolic genes analyzed</b>	<b>0.4020</b>	<b>0.2495</b>
<b>HSDH activity without effectors</b>	<b>CGS1</b>	<b>0.5011</b>	<b>0.1401</b>
HSDH activity without effectors	CGS1/SAMSs	-0.1727	0.6333
HSDH activity without effectors	CGS1/TS1	-0.3138	0.3772
HSDH activity without effectors	DHDPS1	0.0948	0.7944
HSDH activity without effectors	DHDPS2	0.2127	0.5553
HSDH activity without effectors	DHDPSs	0.1857	0.6075
<b>HSDH activity without effectors</b>	<b>DHDPSs/AK-HSDHs</b>	<b>-0.6010</b>	<b>0.0661</b>
<b>HSDH activity without effectors</b>	<b>DHDPSs/LKR-SDHI</b>	<b>0.5311</b>	<b>0.1142</b>
<b>HSDH activity without effectors</b>	<b>LKR-SDHI</b>	<b>-0.4338</b>	<b>0.2103</b>
HSDH activity without effectors	SAMS1	-0.1021	0.7789
HSDH activity without effectors	SAMS2	0.0605	0.8682
<b>HSDH activity without effectors</b>	<b>SAMS3</b>	<b>0.5124</b>	<b>0.1299</b>
HSDH activity without effectors	SAMS4	0.3744	0.2864
<b>HSDH activity without effectors</b>	<b>SAMSs</b>	<b>0.4021</b>	<b>0.2494</b>
HSDH activity without effectors	TD1	0.0960	0.7919
<b>HSDH activity without effectors</b>	<b>TD1/BCAT1</b>	<b>0.4691</b>	<b>0.1714</b>
HSDH activity without effectors	THA1	-0.2325	0.5180
HSDH activity without effectors	THA2	0.1389	0.7020
HSDH activity without effectors	THAs	0.0184	0.9599
HSDH activity without effectors	THAs+TD1	0.1155	0.7506
<b>HSDH activity without effectors</b>	<b>TS1</b>	<b>0.4788</b>	<b>0.1615</b>
HSDH activity without effectors	TS1/(THAs+TD1)	0.3603	0.3064
HSDH activity without effectors	TS1/TD1	0.2897	0.4169
HSDH activity without effectors	TS1/THAs	0.3916	0.2631
LKR-SDHI	AK1	-0.1312	0.7178
LKR-SDHI	AK2	0.2951	0.4078
LKR-SDHI	AK3	0.1647	0.6494
<b>LKR-SDHI</b>	<b>AK-HSDH1</b>	<b>-0.5670</b>	<b>0.0874</b>

<i>LKR-SDHI</i>	<i>AK-HSDH2</i>	<b>-0.6844</b>	<b>0.0290</b>
<i>LKR-SDHI</i>	<i>CGS1</i>	<b>-0.6692</b>	<b>0.0343</b>
<i>LKR-SDHI</i>	<i>DHDPS1</i>	<b>0.5814</b>	<b>0.0779</b>
<i>LKR-SDHI</i>	<i>DHDPS2</i>	<b>-0.5591</b>	<b>0.0929</b>
<i>LKR-SDHI</i>	<i>TD1</i>	-0.1076	0.7673
<i>LKR-SDHI</i>	<i>TS1</i>	-0.1742	0.6304
Lys-sensitive AK activity	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.3628	0.3029
<b>Lys-sensitive AK activity</b>	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>0.4260</b>	<b>0.2197</b>
Lys-sensitive AK activity	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0639	0.8609
<b>Lys-sensitive AK activity</b>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	<b>0.4259</b>	<b>0.2197</b>
<b>Lys-sensitive AK activity</b>	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	<b>0.5868</b>	<b>0.0745</b>
<b>Lys-sensitive AK activity</b>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	<b>0.4484</b>	<b>0.1937</b>
<b>Lys-sensitive AK activity</b>	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>0.7232</b>	<b>0.0181</b>
Lys-sensitive AK activity	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0435	0.9050
<b>Lys-sensitive AK activity</b>	<i>(AKs+DHDPSs)/LKR-SDHI</i>	<b>0.5912</b>	<b>0.0718</b>
<b>Lys-sensitive AK activity</b>	<b>AK activity with four effectors</b>	<b>0.7769</b>	<b>0.0082</b>
<b>Lys-sensitive AK activity</b>	<b>AK activity without effectors</b>	<b>0.8360</b>	<b>0.0026</b>
<b>Lys-sensitive AK activity</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.7477</b>	<b>0.0129</b>
<b>Lys-sensitive AK activity</b>	<b>AK activity/HSDH activity without effectors</b>	<b>0.6205</b>	<b>0.0556</b>
Lys-sensitive AK activity	<i>AK1</i>	-0.0829	0.8200
<b>Lys-sensitive AK activity</b>	<i>AK1+AK2</i>	<b>0.6960</b>	<b>0.0254</b>
Lys-sensitive AK activity	<i>AK1+AK3</i>	-0.2384	0.5072
<b>Lys-sensitive AK activity</b>	<i>AK2</i>	<b>0.6877</b>	<b>0.0280</b>
<b>Lys-sensitive AK activity</b>	<i>AK2+AK3</i>	<b>0.6323</b>	<b>0.0498</b>
Lys-sensitive AK activity	<i>AK3</i>	-0.2156	0.5496
Lys-sensitive AK activity	<i>AK-HSDH1</i>	0.0146	0.9681
Lys-sensitive AK activity	<i>AK-HSDH2</i>	-0.3032	0.3944
Lys-sensitive AK activity	<i>AK-HSDHs</i>	-0.1885	0.6021
Lys-sensitive AK activity	<i>AK-HSDHs+CGS1</i>	-0.1078	0.7670
Lys-sensitive AK activity	<i>AK-HSDHs+TS1</i>	-0.0190	0.9584
Lys-sensitive AK activity	<i>AK-HSDHs+TS1+TD1</i>	-0.0605	0.8682
Lys-sensitive AK activity	<i>AK-HSDHs+TS1+THAs</i>	-0.0091	0.9800
<b>Lys-sensitive AK activity</b>	<i>AKs</i>	<b>0.6449</b>	<b>0.0441</b>
<b>Lys-sensitive AK activity</b>	<i>AKs/AK-HSDHs</i>	<b>0.4259</b>	<b>0.2197</b>
<b>Lys-sensitive AK activity</b>	<i>AKs+AK-HSDHs</i>	<b>0.6192</b>	<b>0.0563</b>
<b>Lys-sensitive AK activity</b>	<i>AKs+AK-HSDHs+CGS1</i>	<b>0.5867</b>	<b>0.0746</b>
<b>Lys-sensitive AK activity</b>	<i>AKs+AK-HSDHs+DHDPSs</i>	<b>0.5999</b>	<b>0.0667</b>
<b>Lys-sensitive AK activity</b>	<i>AKs+AK-HSDHs+TS1</i>	<b>0.5137</b>	<b>0.1288</b>
<b>Lys-sensitive AK activity</b>	<i>AKs+AK-HSDHs+TS1+TD1</i>	<b>0.4702</b>	<b>0.1702</b>
<b>Lys-sensitive AK activity</b>	<i>AKs+AK-HSDHs+TS1+THAs</i>	<b>0.5187</b>	<b>0.1245</b>
<b>Lys-sensitive AK activity</b>	<i>AKs+DHDPSs</i>	<b>0.6280</b>	<b>0.0518</b>
<b>Lys-sensitive AK activity</b>	<i>BCAT1</i>	<b>0.6128</b>	<b>0.0596</b>
<b>Lys-sensitive AK activity</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4544</b>	<b>0.1871</b>
Lys-sensitive AK activity	Catabolic genes analyzed	-0.3335	0.3464
Lys-sensitive AK activity	<i>CGS1</i>	0.0028	0.9938
Lys-sensitive AK activity	<i>CGS1/SAMSs</i>	0.3119	0.3803
Lys-sensitive AK activity	<i>CGS1/TS1</i>	-0.0355	0.9225
Lys-sensitive AK activity	<i>DHDPS1</i>	-0.2976	0.4037
Lys-sensitive AK activity	<i>DHDPS2</i>	-0.2602	0.4678
Lys-sensitive AK activity	<i>DHDPSs</i>	-0.3643	0.3007
Lys-sensitive AK activity	<i>DHDPSs/AK-HSDHs</i>	0.0800	0.8261
Lys-sensitive AK activity	<i>DHDPSs/LKR-SDHI</i>	-0.2150	0.5508
Lys-sensitive AK activity	HSDH activity with four effectors	-0.0984	0.7867
Lys-sensitive AK activity	HSDH activity without effectors	0.0149	0.9675
Lys-sensitive AK activity	<i>LKR-SDHI</i>	0.0295	0.9355
<b>Lys-sensitive AK activity</b>	<i>SAMS1</i>	<b>-0.7735</b>	<b>0.0087</b>
Lys-sensitive AK activity	<i>SAMS2</i>	-0.3295	0.3525



Lys-sensitive AK activity	<i>SAMS3</i>	-0.0049	0.9893
Lys-sensitive AK activity	<i>SAMS4</i>	-0.3010	0.3980
Lys-sensitive AK activity	<i>SAMSs</i>	-0.3361	0.3423
<b>Lys-sensitive AK activity</b>	<b><i>TD1</i></b>	<b>-0.4552</b>	<b>0.1862</b>
Lys-sensitive AK activity	<i>TD1/BCAT1</i>	-0.1185	0.7443
Lys-sensitive AK activity	<i>THA1</i>	-0.0952	0.7935
<b>Lys-sensitive AK activity</b>	<b><i>THA2</i></b>	<b>0.4923</b>	<b>0.1483</b>
<b>Lys-sensitive AK activity</b>	<b><i>THAs</i></b>	<b>0.5119</b>	<b>0.1304</b>
Lys-sensitive AK activity	<i>THAs+TD1</i>	-0.3420	0.3334
Lys-sensitive AK activity	<i>TS1</i>	0.0597	0.8699
<b>Lys-sensitive AK activity</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>0.4940</b>	<b>0.1468</b>
<b>Lys-sensitive AK activity</b>	<b><i>TS1/TD1</i></b>	<b>0.4673</b>	<b>0.1732</b>
<b>Lys-sensitive AK activity</b>	<b><i>TS1/THAs</i></b>	<b>-0.5507</b>	<b>0.0990</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.3500	0.3214
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.1867	0.6055
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0753	0.8361
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>0.6654</b>	<b>0.0358</b>
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>0.5508</b>	<b>0.0989</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.1398	0.7001
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1003	0.7827
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.0559	0.8781
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0007	0.9985
Lys-sensitive AK activity/Thr-sensitive AK activity	AK activity with four effectors	0.2987	0.4018
Lys-sensitive AK activity/Thr-sensitive AK activity	AK activity without effectors	0.3917	0.2630
Lys-sensitive AK activity/Thr-sensitive AK activity	AK activity/HSDH activity with four effectors	0.3317	0.3491
Lys-sensitive AK activity/Thr-sensitive AK activity	AK activity/HSDH activity without effectors	0.3602	0.3066
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AK1</i>	-0.0781	0.8302
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>AK1+AK2</i></b>	<b>0.4341</b>	<b>0.2100</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AK1+AK3</i>	-0.0173	0.9622
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>AK2</i></b>	<b>0.4346</b>	<b>0.2094</b>
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>AK2+AK3</i></b>	<b>0.4329</b>	<b>0.2114</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AK3</i>	0.0642	0.8602
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AK-HSDH1</i>	-0.3950	0.2586
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>AK-HSDH2</i></b>	<b>-0.4434</b>	<b>0.1993</b>
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>AK-HSDHs</i></b>	<b>-0.5107</b>	<b>0.1314</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AK-HSDHs+CGS1</i>	-0.3133	0.3781
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AK-HSDHs+TS1</i>	-0.2672	0.4555
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AK-HSDHs+TS1+TD1</i>	-0.2670	0.4558
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AK-HSDHs+TS1+THAs</i>	-0.2505	0.4852
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>AKs</i></b>	<b>0.4390</b>	<b>0.2044</b>
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>AKs/AK-HSDHs</i></b>	<b>0.6654</b>	<b>0.0358</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AKs+AK-HSDHs</i>	0.3215	0.3650
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AKs+AK-HSDHs+CGS1</i>	0.2939	0.4097
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AKs+AK-HSDHs+DHDPSs</i>	0.3070	0.3883
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AKs+AK-HSDHs+TS1</i>	0.1934	0.5924
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.1736	0.6315
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.2031	0.5735
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>AKs+DHDPSs</i></b>	<b>0.4252</b>	<b>0.2206</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>BCAT1</i>	0.0050	0.9891
Lys-sensitive AK activity/Thr-sensitive AK activity	Biosynthetic genes analyzed	0.1583	0.6623
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>Catabolic genes analyzed</b>	<b>-0.4529</b>	<b>0.1888</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>CGS1</i>	-0.0446	0.9026
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>CGS1/SAMSs</i></b>	<b>0.5820</b>	<b>0.0775</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>CGS1/TS1</i>	0.1761	0.6266
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>DHDPS1</i>	0.0997	0.7841
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>DHDPS2</i></b>	<b>-0.4593</b>	<b>0.1818</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>DHDPSs</i>	-0.2640	0.4611

<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>DHDPSs/AK-HSDHs</b>	<b>0.5788</b>	<b>0.0795</b>
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>DHDPSs/LKR-SDHI</b>	<b>-0.5343</b>	<b>0.1116</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	HSDH activity with four effectors	-0.1339	0.7124
Lys-sensitive AK activity/Thr-sensitive AK activity	HSDH activity without effectors	-0.0964	0.7910
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>LKR-SDHI</i>	0.3820	0.2760
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>Lys-sensitive AK activity</b>	<b>0.4408</b>	<b>0.2023</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>SAMS1</i>	-0.2717	0.4475
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>SAMS2</i>	0.0728	0.8416
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>SAMS3</i>	-0.3927	0.2617
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>SAMS4</i></b>	<b>-0.4382</b>	<b>0.2053</b>
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>SAMSs</i></b>	<b>-0.4549</b>	<b>0.1866</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>TD1</i>	-0.2312	0.5205
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>TD1/BCAT1</i>	-0.0990	0.7856
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>THA1</i>	-0.1319	0.7165
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>THA2</i></b>	<b>0.7611</b>	<b>0.0106</b>
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>THAs</i></b>	<b>0.7842</b>	<b>0.0072</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>THAs+TD1</i>	-0.0705	0.8466
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>Thr-sensitive AK activity</b>	<b>-0.7265</b>	<b>0.0173</b>
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>TS1</i>	-0.1247	0.7315
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>TS1/(THAs+TD1)</i>	-0.1045	0.7739
Lys-sensitive AK activity/Thr-sensitive AK activity	<i>TS1/TD1</i>	-0.0171	0.9625
<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b><i>TS1/THAs</i></b>	<b>-0.5884</b>	<b>0.0735</b>
Protein-bound Ala	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.3709	0.2913
Protein-bound Ala	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.3252	0.3592
<b>Protein-bound Ala</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.4899</b>	<b>0.1506</b>
Protein-bound Ala	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.3349	0.3442
Protein-bound Ala	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.3192	0.3686
Protein-bound Ala	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.0001	0.9997
Protein-bound Ala	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0949	0.7944
<b>Protein-bound Ala</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.5112</b>	<b>0.1310</b>
Protein-bound Ala	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0962	0.7916
Protein-bound Ala	AK activity with four effectors	0.0240	0.9475
Protein-bound Ala	AK activity without effectors	0.2536	0.4795
Protein-bound Ala	AK activity/HSDH activity with four effectors	0.0070	0.9847
Protein-bound Ala	AK activity/HSDH activity without effectors	-0.1362	0.7076
Protein-bound Ala	<i>AK1</i>	-0.1318	0.7166
Protein-bound Ala	<i>AK1+AK2</i>	-0.2718	0.4475
Protein-bound Ala	<i>AK1+AK3</i>	-0.0108	0.9765
Protein-bound Ala	<i>AK2</i>	-0.2358	0.5120
Protein-bound Ala	<i>AK2+AK3</i>	-0.2053	0.5694
Protein-bound Ala	<i>AK3</i>	0.1311	0.7181
<b>Protein-bound Ala</b>	<b><i>AK-HSDHI</i></b>	<b>0.6149</b>	<b>0.0585</b>
Protein-bound Ala	<i>AK-HSDH2</i>	-0.1391	0.7015
Protein-bound Ala	<i>AK-HSDHs</i>	0.2525	0.4815
Protein-bound Ala	<i>AK-HSDHs+CGS1</i>	0.0836	0.8184
Protein-bound Ala	<i>AK-HSDHs+TS1</i>	0.3793	0.2797
Protein-bound Ala	<i>AK-HSDHs+TS1+TD1</i>	0.3593	0.3079
Protein-bound Ala	<i>AK-HSDHs+TS1+THAs</i>	0.3753	0.2853
Protein-bound Ala	<i>AKs</i>	-0.2437	0.4974
Protein-bound Ala	<i>AKs/AK-HSDHs</i>	-0.3349	0.3442
Protein-bound Ala	<i>AKs+AK-HSDHs</i>	-0.1868	0.6053
Protein-bound Ala	<i>AKs+AK-HSDHs+CGS1</i>	-0.2016	0.5765
Protein-bound Ala	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.1816	0.6155
Protein-bound Ala	<i>AKs+AK-HSDHs+TS1</i>	0.0353	0.9228
Protein-bound Ala	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.0388	0.9153
Protein-bound Ala	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.0327	0.9286
Protein-bound Ala	<i>AKs+DHDPSs</i>	-0.2399	0.5045

<b>Protein-bound Ala</b>	<b>BCAT1</b>	<b>0.5054</b>	<b>0.1361</b>
Protein-bound Ala	Biosynthetic genes analyzed	0.0153	0.9666
Protein-bound Ala	Catabolic genes analyzed	0.2315	0.5198
Protein-bound Ala	<i>CGSI</i>	-0.1127	0.7566
<b>Protein-bound Ala</b>	<b><i>CGSI/SAMSs</i></b>	<b>-0.4414</b>	<b>0.2016</b>
<b>Protein-bound Ala</b>	<b><i>CGSI/TS1</i></b>	<b>-0.6339</b>	<b>0.0491</b>
Protein-bound Ala	<i>DHDPS1</i>	0.0439	0.9041
Protein-bound Ala	<i>DHDPS2</i>	0.0583	0.8730
Protein-bound Ala	<i>DHDPSs</i>	0.0744	0.8382
Protein-bound Ala	<i>DHDPSs/AK-HSDHs</i>	-0.2798	0.4337
Protein-bound Ala	<i>DHDPSs/LKR-SDHI</i>	0.1752	0.6282
Protein-bound Ala	Free (Lys+Met+Thr+Ile)/Asp	0.3404	0.3358
Protein-bound Ala	Free Ala	-0.0139	0.9696
<b>Protein-bound Ala</b>	<b>Free Arg</b>	<b>-0.4644</b>	<b>0.1763</b>
Protein-bound Ala	Free Asn	-0.3477	0.3249
Protein-bound Ala	Free Asn+Asp	-0.3538	0.3159
Protein-bound Ala	Free Asn+Asp+Lys+Met+Thr+Ile	-0.0214	0.9532
Protein-bound Ala	Free Asn+Asp+Lys+Thr+Ile	-0.0170	0.9628
Protein-bound Ala	Free Asp	-0.3510	0.3200
Protein-bound Ala	Free Asp+Lys+Met+Thr+Ile	0.0045	0.9902
Protein-bound Ala	Free Cys	-0.0635	0.8616
Protein-bound Ala	Free Gln	-0.3371	0.3408
<b>Protein-bound Ala</b>	<b>Free Glu</b>	<b>-0.4530</b>	<b>0.1886</b>
Protein-bound Ala	Free Gly	-0.0470	0.8975
Protein-bound Ala	Free Gly/Thr	0.0801	0.8259
Protein-bound Ala	Free Gly+Ile	-0.0429	0.9063
Protein-bound Ala	Free His	-0.3279	0.3550
Protein-bound Ala	Free Ile	0.0565	0.8767
Protein-bound Ala	Free Ile/Thr	0.1069	0.7688
Protein-bound Ala	Free Leu	-0.2878	0.4200
<b>Protein-bound Ala</b>	<b>Free Lys</b>	<b>-0.4781</b>	<b>0.1622</b>
Protein-bound Ala	Free Lys/(Met+Thr+Ile)	0.0050	0.9892
Protein-bound Ala	Free Lys/Asp	0.0002	0.9995
Protein-bound Ala	Free Lys/Thr	0.0354	0.9226
Protein-bound Ala	Free Lys+Met+Thr+Ile	0.1519	0.6753
<b>Protein-bound Ala</b>	<b>Free Met</b>	<b>-0.5565</b>	<b>0.0948</b>
Protein-bound Ala	Free Met/(Thr+Ile)	-0.0314	0.9314
Protein-bound Ala	Free Met/Thr	0.0319	0.9304
Protein-bound Ala	Free Met+Thr+Ile	0.1692	0.6402
Protein-bound Ala	Free Phe	-0.1366	0.7066
<b>Protein-bound Ala</b>	<b>Free Pro</b>	<b>-0.4670</b>	<b>0.1736</b>
Protein-bound Ala	Free Ser	0.0136	0.9702
Protein-bound Ala	Free Thr	0.1758	0.6272
Protein-bound Ala	Free Thr/(Gly+Ile)	0.1627	0.6533
Protein-bound Ala	Free Thr/Asp	0.3419	0.3336
Protein-bound Ala	Free Trp	-0.0620	0.8648
Protein-bound Ala	Free Tyr	-0.2450	0.4951
Protein-bound Ala	Free Val	0.0831	0.8194
Protein-bound Ala	HSDH activity with four effectors	-0.0934	0.7974
Protein-bound Ala	HSDH activity without effectors	0.1868	0.6053
Protein-bound Ala	<i>LKR-SDHI</i>	0.0231	0.9496
Protein-bound Ala	Lys-sensitive AK activity	0.1653	0.6480
Protein-bound Ala	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.3809	0.2775
Protein-bound Ala	<i>SAMS1</i>	-0.1313	0.7177
Protein-bound Ala	<i>SAMS2</i>	0.0934	0.7974
Protein-bound Ala	<i>SAMS3</i>	0.2995	0.4006
Protein-bound Ala	<i>SAMS4</i>	0.3042	0.3928

Protein-bound Ala	<i>SAMSs</i>	0.2274	0.5275
Protein-bound Ala	<i>TD1</i>	0.0684	0.8510
<b>Protein-bound Ala</b>	<b><i>TD1/BCAT1</i></b>	<b>-0.4878</b>	<b>0.1526</b>
Protein-bound Ala	<i>THA1</i>	0.2323	0.5184
Protein-bound Ala	<i>THA2</i>	-0.1969	0.5856
Protein-bound Ala	<i>THAs</i>	-0.2067	0.5667
Protein-bound Ala	<i>THAs+TD1</i>	0.0355	0.9225
<b>Protein-bound Ala</b>	<b>Thr-sensitive AK activity</b>	<b>0.6035</b>	<b>0.0647</b>
Protein-bound Ala	Total free AAs	-0.3088	0.3854
Protein-bound Ala	<i>TS1</i>	0.3848	0.2722
Protein-bound Ala	<i>TS1/(THAs+TD1)</i>	0.3609	0.3056
Protein-bound Ala	<i>TS1/TD1</i>	0.2031	0.5735
Protein-bound Ala	<i>TS1/THAs</i>	0.3298	0.3520
Protein-bound Arg	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.1772	0.6244
Protein-bound Arg	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1891	0.6008
<b>Protein-bound Arg</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.5404</b>	<b>0.1068</b>
Protein-bound Arg	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.3084	0.3860
Protein-bound Arg	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.1948	0.5896
<b>Protein-bound Arg</b>	<b><i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i></b>	<b>-0.4006</b>	<b>0.2513</b>
Protein-bound Arg	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.2627	0.4634
<b>Protein-bound Arg</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.5343</b>	<b>0.1116</b>
Protein-bound Arg	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.3060	0.3898
Protein-bound Arg	AK activity with four effectors	-0.3541	0.3155
Protein-bound Arg	AK activity without effectors	-0.1834	0.6120
Protein-bound Arg	AK activity/HSDH activity with four effectors	0.0553	0.8795
Protein-bound Arg	AK activity/HSDH activity without effectors	0.0828	0.8201
Protein-bound Arg	<i>AK1</i>	-0.1887	0.6017
Protein-bound Arg	<i>AK1+AK2</i>	-0.0836	0.8184
Protein-bound Arg	<i>AK1+AK3</i>	-0.2623	0.4640
Protein-bound Arg	<i>AK2</i>	-0.0422	0.9078
Protein-bound Arg	<i>AK2+AK3</i>	-0.0601	0.8689
Protein-bound Arg	<i>AK3</i>	-0.1074	0.7678
Protein-bound Arg	<i>AK-HSDH1</i>	-0.2946	0.4087
<b>Protein-bound Arg</b>	<b><i>AK-HSDH2</i></b>	<b>-0.7196</b>	<b>0.0190</b>
<b>Protein-bound Arg</b>	<b><i>AK-HSDHs</i></b>	<b>-0.6365</b>	<b>0.0478</b>
<b>Protein-bound Arg</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>-0.7045</b>	<b>0.0229</b>
<b>Protein-bound Arg</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>-0.6499</b>	<b>0.0419</b>
<b>Protein-bound Arg</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>-0.6733</b>	<b>0.0329</b>
<b>Protein-bound Arg</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>-0.6498</b>	<b>0.0420</b>
Protein-bound Arg	<i>AKs</i>	-0.1022	0.7787
Protein-bound Arg	<i>AKs/AK-HSDHs</i>	0.3084	0.3860
Protein-bound Arg	<i>AKs+AK-HSDHs</i>	-0.2751	0.4417
<b>Protein-bound Arg</b>	<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b>-0.4050</b>	<b>0.2456</b>
Protein-bound Arg	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.3005	0.3989
<b>Protein-bound Arg</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>-0.4834</b>	<b>0.1569</b>
<b>Protein-bound Arg</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>-0.5139</b>	<b>0.1286</b>
<b>Protein-bound Arg</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>-0.4811</b>	<b>0.1592</b>
Protein-bound Arg	<i>AKs+DHDPSs</i>	-0.1310	0.7182
<b>Protein-bound Arg</b>	<b><i>BCAT1</i></b>	<b>0.6135</b>	<b>0.0592</b>
<b>Protein-bound Arg</b>	<b>Biosynthetic genes analyzed</b>	<b>-0.5662</b>	<b>0.0879</b>
<b>Protein-bound Arg</b>	<b>Catabolic genes analyzed</b>	<b>-0.7034</b>	<b>0.0232</b>
<b>Protein-bound Arg</b>	<b><i>CGS1</i></b>	<b>-0.6407</b>	<b>0.0459</b>
<b>Protein-bound Arg</b>	<b><i>CGS1/SAMSs</i></b>	<b>0.4104</b>	<b>0.2387</b>
Protein-bound Arg	<i>CGS1/TS1</i>	0.1467	0.6858
<b>Protein-bound Arg</b>	<b><i>DHDPS1</i></b>	<b>-0.4112</b>	<b>0.2378</b>
<b>Protein-bound Arg</b>	<b><i>DHDPS2</i></b>	<b>-0.6894</b>	<b>0.0274</b>
<b>Protein-bound Arg</b>	<b><i>DHDPSs</i></b>	<b>-0.7291</b>	<b>0.0167</b>

<b>Protein-bound Arg</b>	<i>DHDPSs/AK-HSDHs</i>	<b>0.4496</b>	<b>0.1923</b>
<b>Protein-bound Arg</b>	<i>DHDPSs/LKR-SDHI</i>	<b>-0.6478</b>	<b>0.0428</b>
Protein-bound Arg	Free (Lys+Met+Thr+Ile)/Asp	0.1028	0.7774
<b>Protein-bound Arg</b>	<b>Free Ala</b>	<b>-0.5533</b>	<b>0.0971</b>
<b>Protein-bound Arg</b>	<b>Free Arg</b>	<b>-0.9048</b>	<b>0.0003</b>
<b>Protein-bound Arg</b>	<b>Free Asn</b>	<b>-0.8118</b>	<b>0.0043</b>
<b>Protein-bound Arg</b>	<b>Free Asn+Asp</b>	<b>-0.5292</b>	<b>0.1157</b>
Protein-bound Arg	Free Asn+Asp+Lys+Met+Thr+Ile	-0.3182	0.3703
Protein-bound Arg	Free Asn+Asp+Lys+Thr+Ile	-0.3135	0.3777
<b>Protein-bound Arg</b>	<b>Free Asp</b>	<b>-0.4780</b>	<b>0.1623</b>
Protein-bound Arg	Free Asp+Lys+Met+Thr+Ile	-0.2716	0.4477
Protein-bound Arg	Free Cys	-0.3623	0.3036
<b>Protein-bound Arg</b>	<b>Free Gln</b>	<b>-0.8129</b>	<b>0.0042</b>
Protein-bound Arg	Free Glu	-0.3967	0.2564
<b>Protein-bound Arg</b>	<b>Free Gly</b>	<b>-0.5923</b>	<b>0.0712</b>
Protein-bound Arg	Free Gly/Thr	0.0023	0.9950
<b>Protein-bound Arg</b>	<b>Free Gly+Ile</b>	<b>-0.6191</b>	<b>0.0563</b>
<b>Protein-bound Arg</b>	<b>Free His</b>	<b>-0.8831</b>	<b>0.0007</b>
<b>Protein-bound Arg</b>	<b>Free Ile</b>	<b>-0.5201</b>	<b>0.1233</b>
Protein-bound Arg	Free Ile/Thr	0.1332	0.7137
<b>Protein-bound Arg</b>	<b>Free Leu</b>	<b>-0.7528</b>	<b>0.0120</b>
<b>Protein-bound Arg</b>	<b>Free Lys</b>	<b>-0.7468</b>	<b>0.0131</b>
Protein-bound Arg	Free Lys/(Met+Thr+Ile)	-0.0058	0.9873
Protein-bound Arg	Free Lys/Asp	-0.1838	0.6112
Protein-bound Arg	Free Lys/Thr	0.0352	0.9232
Protein-bound Arg	Free Lys+Met+Thr+Ile	-0.0807	0.8245
Protein-bound Arg	Free Met	-0.3924	0.2620
Protein-bound Arg	Free Met/(Thr+Ile)	0.0471	0.8973
Protein-bound Arg	Free Met/Thr	0.1426	0.6943
Protein-bound Arg	Free Met+Thr+Ile	-0.0532	0.8839
<b>Protein-bound Arg</b>	<b>Free Phe</b>	<b>-0.7281</b>	<b>0.0170</b>
<b>Protein-bound Arg</b>	<b>Free Pro</b>	<b>-0.6827</b>	<b>0.0296</b>
<b>Protein-bound Arg</b>	<b>Free Ser</b>	<b>-0.4586</b>	<b>0.1825</b>
Protein-bound Arg	Free Thr	-0.0394	0.9140
Protein-bound Arg	Free Thr/(Gly+Ile)	0.0564	0.8770
Protein-bound Arg	Free Thr/Asp	0.1102	0.7619
<b>Protein-bound Arg</b>	<b>Free Trp</b>	<b>-0.7489</b>	<b>0.0127</b>
<b>Protein-bound Arg</b>	<b>Free Tyr</b>	<b>-0.5851</b>	<b>0.0756</b>
<b>Protein-bound Arg</b>	<b>Free Val</b>	<b>-0.6115</b>	<b>0.0603</b>
<b>Protein-bound Arg</b>	<b>HSDH activity with four effectors</b>	<b>-0.7135</b>	<b>0.0205</b>
<b>Protein-bound Arg</b>	<b>HSDH activity without effectors</b>	<b>-0.4430</b>	<b>0.1997</b>
Protein-bound Arg	<i>LKR-SDHI</i>	0.3864	0.2701
Protein-bound Arg	Lys-sensitive AK activity	0.1963	0.5868
Protein-bound Arg	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.0799	0.8264
Protein-bound Arg	Protein-bound Ala	0.2463	0.4928
<b>Protein-bound Arg</b>	<b>SAMS1</b>	<b>-0.4666</b>	<b>0.1740</b>
<b>Protein-bound Arg</b>	<b>SAMS2</b>	<b>-0.5728</b>	<b>0.0835</b>
<b>Protein-bound Arg</b>	<b>SAMS3</b>	<b>-0.5637</b>	<b>0.0897</b>
<b>Protein-bound Arg</b>	<b>SAMS4</b>	<b>-0.6668</b>	<b>0.0352</b>
<b>Protein-bound Arg</b>	<b>SAMSs</b>	<b>-0.7030</b>	<b>0.0233</b>
<b>Protein-bound Arg</b>	<b>TD1</b>	<b>-0.7130</b>	<b>0.0206</b>
<b>Protein-bound Arg</b>	<b>TD1/BCAT1</b>	<b>-0.5850</b>	<b>0.0757</b>
<b>Protein-bound Arg</b>	<b>THA1</b>	<b>0.6611</b>	<b>0.0374</b>
Protein-bound Arg	<i>THA2</i>	-0.1843	0.6103
Protein-bound Arg	<i>THAs</i>	-0.1189	0.7436
<b>Protein-bound Arg</b>	<b>THAs+TD1</b>	<b>-0.7140</b>	<b>0.0204</b>
Protein-bound Arg	Thr-sensitive AK activity	0.1768	0.6252
<b>Protein-bound Arg</b>	<b>Total free AAs</b>	<b>-0.6683</b>	<b>0.0347</b>

<b>Protein-bound Arg</b>	<i>TS1</i>	<b>-0.5684</b>	<b>0.0865</b>
<b>Protein-bound Arg</b>	<i>TS1/(THAs+TD1)</i>	<b>0.4076</b>	<b>0.2423</b>
Protein-bound Arg	<i>TS1/TD1</i>	0.3260	0.3580
<b>Protein-bound Arg</b>	<i>TS1/THAs</i>	<b>-0.6256</b>	<b>0.0530</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>(AK-HSDHs+CGS1)/SAMsS</i>	-0.1843	0.6103
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	<b>0.4153</b>	<b>0.2327</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	<b>-0.4577</b>	<b>0.1835</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.3224	0.3637
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>(AKs+AK-HSDHs+CGS1)/SAMsS</i>	-0.2831	0.4279
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.0136	0.9702
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1821	0.6146
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	<b>-0.4761</b>	<b>0.1642</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0580	0.8736
Protein-bound Asn+Asp+Ile+Lys+Thr	AK activity with four effectors	0.0074	0.9838
Protein-bound Asn+Asp+Ile+Lys+Thr	AK activity without effectors	0.2256	0.5308
Protein-bound Asn+Asp+Ile+Lys+Thr	AK activity/HSDH activity with four effectors	0.0265	0.9421
Protein-bound Asn+Asp+Ile+Lys+Thr	AK activity/HSDH activity without effectors	-0.0877	0.8096
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK1</i>	-0.2402	0.5039
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK1+AK2</i>	-0.2838	0.4268
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK1+AK3</i>	-0.1590	0.6609
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK2</i>	-0.2250	0.5321
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK2+AK3</i>	-0.2051	0.5698
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK3</i>	0.0747	0.8375
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<i>AK-HSDHI</i>	<b>0.5224</b>	<b>0.1214</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK-HSDH2</i>	-0.1923	0.5946
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK-HSDHs</i>	0.1663	0.6460
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK-HSDHs+CGS1</i>	0.0437	0.9045
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK-HSDHs+TS1</i>	0.3062	0.3896
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK-HSDHs+TS1+TD1</i>	0.2760	0.4402
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AK-HSDHs+TS1+THAs</i>	0.3030	0.3948
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AKs</i>	-0.2660	0.4575
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AKs/AK-HSDHs</i>	-0.3224	0.3637
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AKs+AK-HSDHs</i>	-0.2336	0.5160
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AKs+AK-HSDHs+CGS1</i>	-0.2411	0.5023
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.2341	0.5151
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AKs+AK-HSDHs+TS1</i>	-0.0280	0.9388
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.0328	0.9283
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.0300	0.9344
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>AKs+DHDPSs</i>	-0.2683	0.4535
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<i>BCAT1</i>	<b>0.6170</b>	<b>0.0574</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	Biosynthetic genes analyzed	-0.0431	0.9059
Protein-bound Asn+Asp+Ile+Lys+Thr	Catabolic genes analyzed	0.0739	0.8391
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>CGS1</i>	-0.0953	0.7934
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>CGS1/SAMsS</i>	-0.2638	0.4615
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<i>CGS1/TS1</i>	<b>-0.5442</b>	<b>0.1039</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>DHDPS1</i>	-0.1610	0.6569
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>DHDPS2</i>	0.0191	0.9581
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>DHDPSs</i>	-0.0859	0.8134
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>DHDPSs/AK-HSDHs</i>	-0.2340	0.5152
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>DHDPSs/LKR-SDHI</i>	0.1154	0.7508
Protein-bound Asn+Asp+Ile+Lys+Thr	Free (Lys+Met+Thr+Ile)/Asp	0.2126	0.5554
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Ala	-0.1196	0.7422
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free Arg</b>	<b>-0.5595</b>	<b>0.0926</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free Asn</b>	<b>-0.4925</b>	<b>0.1482</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free Asn+Asp</b>	<b>-0.4638</b>	<b>0.1770</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Asn+Asp+Lys+Met+Thr+Ile	-0.2325	0.5181
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Asn+Asp+Lys+Thr+Ile	-0.2286	0.5252

<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free Asp</b>	<b>-0.4572</b>	<b>0.1841</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Asp+Lys+Met+Thr+Ile	-0.2040	0.5718
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Cys	-0.3037	0.3937
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free Gln</b>	<b>-0.5132</b>	<b>0.1293</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free Glu</b>	<b>-0.5194</b>	<b>0.1239</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Gly	-0.2664	0.4569
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Gly/Thr	0.1302	0.7200
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Gly+Ile	-0.2695	0.4515
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free His</b>	<b>-0.4340</b>	<b>0.2101</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Ile	-0.0924	0.7996
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Ile/Thr	0.2696	0.4514
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Leu	-0.3563	0.3123
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free Lys</b>	<b>-0.5343</b>	<b>0.1116</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Lys/(Met+Thr+Ile)	0.1459	0.6875
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Lys/Asp	0.0263	0.9424
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Lys/Thr	0.1919	0.5953
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Lys+Met+Thr+Ile	-0.0227	0.9503
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free Met</b>	<b>-0.4945</b>	<b>0.1463</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Met/(Thr+Ile)	0.1060	0.7708
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Met/Thr	0.1933	0.5926
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Met+Thr+Ile	-0.0031	0.9932
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Phe	-0.2107	0.5591
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Free Pro</b>	<b>-0.5928</b>	<b>0.0709</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Ser	-0.1611	0.6567
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Thr	0.0058	0.9874
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Thr/(Gly+Ile)	0.0289	0.9369
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Thr/Asp	0.2103	0.5597
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Trp	-0.1673	0.6441
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Tyr	-0.2566	0.4741
Protein-bound Asn+Asp+Ile+Lys+Thr	Free Val	0.0725	0.8423
Protein-bound Asn+Asp+Ile+Lys+Thr	HSDH activity with four effectors	-0.1762	0.6262
Protein-bound Asn+Asp+Ile+Lys+Thr	HSDH activity without effectors	0.1022	0.7788
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>LKR-SDHI</i>	-0.0155	0.9660
Protein-bound Asn+Asp+Ile+Lys+Thr	Lys-sensitive AK activity	0.2132	0.5542
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.4173</b>	<b>0.2303</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Ala</b>	<b>0.9225</b>	<b>0.0001</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Arg</b>	<b>0.4629</b>	<b>0.1779</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Gly</b>	<b>0.8414</b>	<b>0.0023</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound His</b>	<b>0.4071</b>	<b>0.2429</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Ile</b>	<b>0.4856</b>	<b>0.1547</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Leu</b>	<b>0.5540</b>	<b>0.0966</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Lys</b>	<b>0.4813</b>	<b>0.1590</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	Protein-bound Phe	0.3784	0.2810
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Pro</b>	<b>0.9192</b>	<b>0.0002</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Ser</b>	<b>0.9462</b>	<b>&lt;.0001</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Thr</b>	<b>0.9487</b>	<b>&lt;.0001</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Tyr</b>	<b>0.8141</b>	<b>0.0041</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Protein-bound Val</b>	<b>0.4465</b>	<b>0.1959</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>SAMS1</i>	-0.2218	0.5379
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>SAMS2</i>	-0.0749	0.8371
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>SAMS3</i>	0.1595	0.6599
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>SAMS4</i>	0.1890	0.6010
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>SAMSs</i>	0.0703	0.8469
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>TD1</i>	-0.0872	0.8106
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b><i>TD1/BCAT1</i></b>	<b>-0.4737</b>	<b>0.1666</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>THA1</i>	0.2812	0.4312
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>THA2</i>	-0.1943	0.5907
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>THAs</i>	-0.1891	0.6009

Protein-bound Asn+Asp+Ile+Lys+Thr	<i>THAs+TDI</i>	-0.1136	0.7548
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Thr-sensitive AK activity</b>	<b>0.7623</b>	<b>0.0104</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Total free AAs</b>	<b>-0.4878</b>	<b>0.1526</b>
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>Total protein-bound AAs</b>	<b>0.9807</b>	<b>&lt;.0001</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>TSI</i>	0.3282	0.3545
<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b><i>TSI/(THAs+TDI)</i></b>	<b>0.5099</b>	<b>0.1322</b>
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>TSI/TDI</i>	0.3113	0.3812
Protein-bound Asn+Asp+Ile+Lys+Thr	<i>TSI/THAs</i>	0.1101	0.7620
Protein-bound Asp+Asn	<i>(AK-HSDHs+CGSI)/SAMSs</i>	-0.2488	0.4883
<b>Protein-bound Asp+Asn</b>	<b><i>(AK-HSDHs+TSI)/(THAs+TDI)</i></b>	<b>0.4651</b>	<b>0.1756</b>
<b>Protein-bound Asp+Asn</b>	<b><i>(AK-HSDHs+TSI+TDI)/BCATI</i></b>	<b>-0.4368</b>	<b>0.2069</b>
Protein-bound Asp+Asn	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.3564	0.3120
Protein-bound Asp+Asn	<i>(AKs+AK-HSDHs+CGSI)/SAMSs</i>	-0.2978	0.4033
Protein-bound Asp+Asn	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.1862	0.6065
Protein-bound Asp+Asn	<i>(AKs+AK-HSDHs+TSI)/(THAs+TDI)</i>	0.2416	0.5012
<b>Protein-bound Asp+Asn</b>	<b><i>(AKs+AK-HSDHs+TSI+TDI)/BCATI</i></b>	<b>-0.4567</b>	<b>0.1846</b>
Protein-bound Asp+Asn	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.0979	0.7879
Protein-bound Asp+Asn	AK activity with four effectors	0.2469	0.4916
<b>Protein-bound Asp+Asn</b>	<b>AK activity without effectors</b>	<b>0.4578</b>	<b>0.1834</b>
Protein-bound Asp+Asn	AK activity/HSDH activity with four effectors	0.1444	0.6907
Protein-bound Asp+Asn	AK activity/HSDH activity without effectors	-0.0229	0.9500
Protein-bound Asp+Asn	<i>AK1</i>	-0.1609	0.6571
Protein-bound Asp+Asn	<i>AK1+AK2</i>	-0.2061	0.5677
Protein-bound Asp+Asn	<i>AK1+AK3</i>	-0.0692	0.8493
Protein-bound Asp+Asn	<i>AK2</i>	-0.1664	0.6460
Protein-bound Asp+Asn	<i>AK2+AK3</i>	-0.1449	0.6897
Protein-bound Asp+Asn	<i>AK3</i>	0.0913	0.8020
<b>Protein-bound Asp+Asn</b>	<b><i>AK-HSDHI</i></b>	<b>0.6743</b>	<b>0.0325</b>
Protein-bound Asp+Asn	<i>AK-HSDH2</i>	-0.0874	0.8102
Protein-bound Asp+Asn	<i>AK-HSDHs</i>	0.3200	0.3673
Protein-bound Asp+Asn	<i>AK-HSDHs+CGSI</i>	0.2071	0.5659
<b>Protein-bound Asp+Asn</b>	<b><i>AK-HSDHs+TSI</i></b>	<b>0.4518</b>	<b>0.1900</b>
<b>Protein-bound Asp+Asn</b>	<b><i>AK-HSDHs+TSI+TDI</i></b>	<b>0.4199</b>	<b>0.2270</b>
<b>Protein-bound Asp+Asn</b>	<b><i>AK-HSDHs+TSI+THAs</i></b>	<b>0.4497</b>	<b>0.1923</b>
Protein-bound Asp+Asn	<i>AKs</i>	-0.1864	0.6060
Protein-bound Asp+Asn	<i>AKs/AK-HSDHs</i>	-0.3564	0.3120
Protein-bound Asp+Asn	<i>AKs+AK-HSDHs</i>	-0.1099	0.7625
Protein-bound Asp+Asn	<i>AKs+AK-HSDHs+CGSI</i>	-0.0923	0.7998
Protein-bound Asp+Asn	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.1084	0.7656
Protein-bound Asp+Asn	<i>AKs+AK-HSDHs+TSI</i>	0.1264	0.7278
Protein-bound Asp+Asn	<i>AKs+AK-HSDHs+TSI+TDI</i>	0.1226	0.7358
Protein-bound Asp+Asn	<i>AKs+AK-HSDHs+TSI+THAs</i>	0.1249	0.7310
Protein-bound Asp+Asn	<i>AKs+DHDPSs</i>	-0.1858	0.6074
<b>Protein-bound Asp+Asn</b>	<b><i>BCATI</i></b>	<b>0.6229</b>	<b>0.0544</b>
Protein-bound Asp+Asn	Biosynthetic genes analyzed	0.1226	0.7358
Protein-bound Asp+Asn	Catabolic genes analyzed	0.2509	0.4845
Protein-bound Asp+Asn	<i>CGSI</i>	0.0460	0.8995
Protein-bound Asp+Asn	<i>CGSI/SAMSs</i>	-0.3865	0.2700
<b>Protein-bound Asp+Asn</b>	<b><i>CGSI/TSI</i></b>	<b>-0.5819</b>	<b>0.0776</b>
Protein-bound Asp+Asn	<i>DHDPS1</i>	-0.1250	0.7309
Protein-bound Asp+Asn	<i>DHDPS2</i>	0.1031	0.7769
Protein-bound Asp+Asn	<i>DHDPSs</i>	-0.0015	0.9967
Protein-bound Asp+Asn	<i>DHDPSs/AK-HSDHs</i>	-0.3672	0.2966
Protein-bound Asp+Asn	<i>DHDPSs/LKR-SDHI</i>	0.2558	0.4757
Protein-bound Asp+Asn	Free (Lys+Met+Thr+Ile)/Asp	0.3726	0.2889
Protein-bound Asp+Asn	Free Ala	-0.1292	0.7220
<b>Protein-bound Asp+Asn</b>	<b>Free Arg</b>	<b>-0.4102</b>	<b>0.2391</b>



<b>Protein-bound Asp+Asn</b>	<b>Free Asn</b>	<b>-0.4130</b>	<b>0.2355</b>
<b>Protein-bound Asp+Asn</b>	<b>Free Asn+Asp</b>	<b>-0.4991</b>	<b>0.1420</b>
Protein-bound Asp+Asn	Free Asn+Asp+Lys+Met+Thr+Ile	-0.1191	0.7431
Protein-bound Asp+Asn	Free Asn+Asp+Lys+Thr+Ile	-0.1147	0.7524
<b>Protein-bound Asp+Asn</b>	<b>Free Asp</b>	<b>-0.5073</b>	<b>0.1345</b>
Protein-bound Asp+Asn	Free Asp+Lys+Met+Thr+Ile	-0.0923	0.7998
Protein-bound Asp+Asn	Free Cys	-0.1415	0.6966
<b>Protein-bound Asp+Asn</b>	<b>Free Gln</b>	<b>-0.4184</b>	<b>0.2288</b>
<b>Protein-bound Asp+Asn</b>	<b>Free Glu</b>	<b>-0.5520</b>	<b>0.0980</b>
Protein-bound Asp+Asn	Free Gly	-0.2117	0.5571
Protein-bound Asp+Asn	Free Gly/Thr	-0.0283	0.9382
Protein-bound Asp+Asn	Free Gly+Ile	-0.2067	0.5666
Protein-bound Asp+Asn	Free His	-0.3092	0.3846
Protein-bound Asp+Asn	Free Ile	0.0441	0.9037
Protein-bound Asp+Asn	Free Ile/Thr	0.0783	0.8297
Protein-bound Asp+Asn	Free Leu	-0.3203	0.3668
<b>Protein-bound Asp+Asn</b>	<b>Free Lys</b>	<b>-0.4925</b>	<b>0.1481</b>
Protein-bound Asp+Asn	Free Lys/(Met+Thr+Ile)	-0.0321	0.9298
Protein-bound Asp+Asn	Free Lys/Asp	0.1760	0.6266
Protein-bound Asp+Asn	Free Lys/Thr	-0.0012	0.9973
Protein-bound Asp+Asn	Free Lys+Met+Thr+Ile	0.1166	0.7483
<b>Protein-bound Asp+Asn</b>	<b>Free Met</b>	<b>-0.5790</b>	<b>0.0794</b>
Protein-bound Asp+Asn	Free Met/(Thr+Ile)	-0.0987	0.7862
Protein-bound Asp+Asn	Free Met/Thr	-0.0384	0.9161
Protein-bound Asp+Asn	Free Met+Thr+Ile	0.1345	0.7110
Protein-bound Asp+Asn	Free Phe	-0.1694	0.6399
<b>Protein-bound Asp+Asn</b>	<b>Free Pro</b>	<b>-0.5653</b>	<b>0.0886</b>
Protein-bound Asp+Asn	Free Ser	-0.1460	0.6873
Protein-bound Asp+Asn	Free Thr	0.1424	0.6948
Protein-bound Asp+Asn	Free Thr/(Gly+Ile)	0.1741	0.6305
Protein-bound Asp+Asn	Free Thr/Asp	0.3665	0.2976
Protein-bound Asp+Asn	Free Trp	-0.0972	0.7893
Protein-bound Asp+Asn	Free Tyr	-0.2239	0.5341
Protein-bound Asp+Asn	Free Val	0.1173	0.7469
Protein-bound Asp+Asn	HSDH activity with four effectors	-0.0087	0.9811
Protein-bound Asp+Asn	HSDH activity without effectors	0.2567	0.4741
Protein-bound Asp+Asn	<i>LKR-SDHI</i>	-0.1349	0.7102
Protein-bound Asp+Asn	Lys-sensitive AK activity	0.3361	0.3423
Protein-bound Asp+Asn	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.2811	0.4314
<b>Protein-bound Asp+Asn</b>	<b>Protein-bound Ala</b>	<b>0.9562</b>	<b>&lt;.0001</b>
Protein-bound Asp+Asn	Protein-bound Arg	0.2167	0.5475
<b>Protein-bound Asp+Asn</b>	<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>0.9365</b>	<b>&lt;.0001</b>
<b>Protein-bound Asp+Asn</b>	<b>Protein-bound Gly</b>	<b>0.9194</b>	<b>0.0002</b>
Protein-bound Asp+Asn	Protein-bound His	0.2903	0.4158
Protein-bound Asp+Asn	Protein-bound Ile	0.2888	0.4183
<b>Protein-bound Asp+Asn</b>	<b>Protein-bound Leu</b>	<b>0.5391</b>	<b>0.1078</b>
Protein-bound Asp+Asn	Protein-bound Lys	0.1846	0.6096
Protein-bound Asp+Asn	Protein-bound Phe	0.1739	0.6308
<b>Protein-bound Asp+Asn</b>	<b>Protein-bound Pro</b>	<b>0.8930</b>	<b>0.0005</b>
<b>Protein-bound Asp+Asn</b>	<b>Protein-bound Ser</b>	<b>0.9951</b>	<b>&lt;.0001</b>
<b>Protein-bound Asp+Asn</b>	<b>Protein-bound Thr</b>	<b>0.8944</b>	<b>0.0005</b>
<b>Protein-bound Asp+Asn</b>	<b>Protein-bound Tyr</b>	<b>0.8135</b>	<b>0.0042</b>
<b>Protein-bound Asp+Asn</b>	<b>Protein-bound Val</b>	<b>0.4038</b>	<b>0.2472</b>
Protein-bound Asp+Asn	<i>SAMS1</i>	-0.2542	0.4784
Protein-bound Asp+Asn	<i>SAMS2</i>	-0.0072	0.9842
Protein-bound Asp+Asn	<i>SAMS3</i>	0.3803	0.2784
Protein-bound Asp+Asn	<i>SAMS4</i>	0.3399	0.3366
Protein-bound Asp+Asn	<i>SAMSs</i>	0.2467	0.4920

Protein-bound Asp+Asn	<i>TD1</i>	-0.0021	0.9953
<b>Protein-bound Asp+Asn</b>	<b><i>TD1/BCAT1</i></b>	<b>-0.4464</b>	<b>0.1959</b>
Protein-bound Asp+Asn	<i>THA1</i>	0.0512	0.8882
Protein-bound Asp+Asn	<i>THA2</i>	-0.0757	0.8353
Protein-bound Asp+Asn	<i>THAs</i>	-0.0986	0.7865
Protein-bound Asp+Asn	<i>THAs+TD1</i>	-0.0121	0.9735
<b>Protein-bound Asp+Asn</b>	<b>Thr-sensitive AK activity</b>	<b>0.6451</b>	<b>0.0440</b>
<b>Protein-bound Asp+Asn</b>	<b>Total free AAs</b>	<b>-0.4291</b>	<b>0.2159</b>
<b>Protein-bound Asp+Asn</b>	<b>Total protein-bound AAs</b>	<b>0.9453</b>	<b>&lt;.0001</b>
<b>Protein-bound Asp+Asn</b>	<b><i>TS1</i></b>	<b>0.4500</b>	<b>0.1919</b>
<b>Protein-bound Asp+Asn</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>0.5003</b>	<b>0.1408</b>
Protein-bound Asp+Asn	<i>TS1/TD1</i>	0.3423	0.3329
Protein-bound Asp+Asn	<i>TS1/THAs</i>	0.2283	0.5257
Protein-bound Glu+Gln	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2372	0.5093
<b>Protein-bound Glu+Gln</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>0.4010</b>	<b>0.2508</b>
<b>Protein-bound Glu+Gln</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.5537</b>	<b>0.0968</b>
Protein-bound Glu+Gln	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.3189	0.3691
Protein-bound Glu+Gln	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.3454	0.3283
Protein-bound Glu+Gln	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.1871	0.6047
Protein-bound Glu+Gln	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1287	0.7231
<b>Protein-bound Glu+Gln</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.5771</b>	<b>0.0807</b>
Protein-bound Glu+Gln	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.2720	0.4472
Protein-bound Glu+Gln	AK activity with four effectors	-0.1811	0.6166
Protein-bound Glu+Gln	AK activity without effectors	0.0850	0.8154
Protein-bound Glu+Gln	AK activity/HSDH activity with four effectors	-0.1351	0.7097
Protein-bound Glu+Gln	AK activity/HSDH activity without effectors	-0.2616	0.4653
Protein-bound Glu+Gln	<i>AK1</i>	-0.1334	0.7134
<b>Protein-bound Glu+Gln</b>	<b><i>AK1+AK2</i></b>	<b>-0.4270</b>	<b>0.2184</b>
Protein-bound Glu+Gln	<i>AK1+AK3</i>	-0.1085	0.7655
Protein-bound Glu+Gln	<i>AK2</i>	-0.3853	0.2715
Protein-bound Glu+Gln	<i>AK2+AK3</i>	-0.3713	0.2908
Protein-bound Glu+Gln	<i>AK3</i>	0.0152	0.9668
<b>Protein-bound Glu+Gln</b>	<b><i>AK-HSDHI</i></b>	<b>0.5112</b>	<b>0.1310</b>
Protein-bound Glu+Gln	<i>AK-HSDH2</i>	-0.3604	0.3062
Protein-bound Glu+Gln	<i>AK-HSDHs</i>	0.0502	0.8904
Protein-bound Glu+Gln	<i>AK-HSDHs+CGS1</i>	-0.1219	0.7372
Protein-bound Glu+Gln	<i>AK-HSDHs+TS1</i>	0.1259	0.7289
Protein-bound Glu+Gln	<i>AK-HSDHs+TS1+TD1</i>	0.0969	0.7901
Protein-bound Glu+Gln	<i>AK-HSDHs+TS1+THAs</i>	0.1218	0.7375
<b>Protein-bound Glu+Gln</b>	<b><i>AKs</i></b>	<b>-0.4175</b>	<b>0.2300</b>
Protein-bound Glu+Gln	<i>AKs/AK-HSDHs</i>	-0.3189	0.3691
<b>Protein-bound Glu+Gln</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>-0.4211</b>	<b>0.2256</b>
<b>Protein-bound Glu+Gln</b>	<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b>-0.4615</b>	<b>0.1794</b>
<b>Protein-bound Glu+Gln</b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>-0.4245</b>	<b>0.2214</b>
Protein-bound Glu+Gln	<i>AKs+AK-HSDHs+TS1</i>	-0.2622	0.4642
Protein-bound Glu+Gln	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.2676	0.4547
Protein-bound Glu+Gln	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.2639	0.4613
<b>Protein-bound Glu+Gln</b>	<b><i>AKs+DHDPSs</i></b>	<b>-0.4240</b>	<b>0.2220</b>
<b>Protein-bound Glu+Gln</b>	<b><i>BCAT1</i></b>	<b>0.6497</b>	<b>0.0420</b>
Protein-bound Glu+Gln	Biosynthetic genes analyzed	-0.2904	0.4156
Protein-bound Glu+Gln	Catabolic genes analyzed	-0.0174	0.9619
Protein-bound Glu+Gln	<i>CGS1</i>	-0.2841	0.4262
Protein-bound Glu+Gln	<i>CGS1/SAMSs</i>	-0.2466	0.4922
<b>Protein-bound Glu+Gln</b>	<b><i>CGS1/TS1</i></b>	<b>-0.5136</b>	<b>0.1289</b>
Protein-bound Glu+Gln	<i>DHDPS1</i>	-0.1146	0.7525
Protein-bound Glu+Gln	<i>DHDPS2</i>	-0.1910	0.5971
Protein-bound Glu+Gln	<i>DHDPSs</i>	-0.2001	0.5794

Protein-bound Glu+Gln	<i>DHDPSs/AK-HSDHs</i>	-0.1381	0.7037
Protein-bound Glu+Gln	<i>DHDPSs/LKR-SDHI</i>	-0.0237	0.9482
Protein-bound Glu+Gln	Free (Lys+Met+Thr+Ile)/Asp	0.2251	0.5319
Protein-bound Glu+Gln	Free Ala	-0.1981	0.5832
<b>Protein-bound Glu+Gln</b>	<b>Free Arg</b>	<b>-0.6555</b>	<b>0.0396</b>
<b>Protein-bound Glu+Gln</b>	<b>Free Asn</b>	<b>-0.5797</b>	<b>0.0790</b>
<b>Protein-bound Glu+Gln</b>	<b>Free Asn+Asp</b>	<b>-0.4816</b>	<b>0.1587</b>
Protein-bound Glu+Gln	Free Asn+Asp+Lys+Met+Thr+Ile	-0.2347	0.5140
Protein-bound Glu+Gln	Free Asn+Asp+Lys+Thr+Ile	-0.2296	0.5234
<b>Protein-bound Glu+Gln</b>	<b>Free Asp</b>	<b>-0.4610</b>	<b>0.1799</b>
Protein-bound Glu+Gln	Free Asp+Lys+Met+Thr+Ile	-0.1989	0.5816
Protein-bound Glu+Gln	Free Cys	-0.2828	0.4286
<b>Protein-bound Glu+Gln</b>	<b>Free Gln</b>	<b>-0.5644</b>	<b>0.0892</b>
<b>Protein-bound Glu+Gln</b>	<b>Free Glu</b>	<b>-0.5912</b>	<b>0.0718</b>
Protein-bound Glu+Gln	Free Gly	-0.2428	0.4990
Protein-bound Glu+Gln	Free Gly/Thr	0.2050	0.5699
Protein-bound Glu+Gln	Free Gly+Ile	-0.2487	0.4885
<b>Protein-bound Glu+Gln</b>	<b>Free His</b>	<b>-0.5754</b>	<b>0.0818</b>
Protein-bound Glu+Gln	Free Ile	-0.1314	0.7175
Protein-bound Glu+Gln	Free Ile/Thr	0.2893	0.4175
<b>Protein-bound Glu+Gln</b>	<b>Free Leu</b>	<b>-0.4655</b>	<b>0.1752</b>
<b>Protein-bound Glu+Gln</b>	<b>Free Lys</b>	<b>-0.6479</b>	<b>0.0428</b>
Protein-bound Glu+Gln	Free Lys/(Met+Thr+Ile)	0.1472	0.6849
Protein-bound Glu+Gln	Free Lys/Asp	-0.0464	0.8987
Protein-bound Glu+Gln	Free Lys/Thr	0.1912	0.5968
Protein-bound Glu+Gln	Free Lys+Met+Thr+Ile	-0.0155	0.9661
<b>Protein-bound Glu+Gln</b>	<b>Free Met</b>	<b>-0.5489</b>	<b>0.1003</b>
Protein-bound Glu+Gln	Free Met/(Thr+Ile)	0.1446	0.6902
Protein-bound Glu+Gln	Free Met/Thr	0.2206	0.5402
Protein-bound Glu+Gln	Free Met+Thr+Ile	0.0083	0.9819
Protein-bound Glu+Gln	Free Phe	-0.3252	0.3592
<b>Protein-bound Glu+Gln</b>	<b>Free Pro</b>	<b>-0.6484</b>	<b>0.0426</b>
Protein-bound Glu+Gln	Free Ser	-0.0856	0.8141
Protein-bound Glu+Gln	Free Thr	0.0183	0.9600
Protein-bound Glu+Gln	Free Thr/(Gly+Ile)	0.0555	0.8791
Protein-bound Glu+Gln	Free Thr/Asp	0.2269	0.5284
Protein-bound Glu+Gln	Free Trp	-0.2428	0.4992
Protein-bound Glu+Gln	Free Tyr	-0.3426	0.3326
Protein-bound Glu+Gln	Free Val	-0.1089	0.7645
Protein-bound Glu+Gln	HSDH activity with four effectors	-0.2312	0.5205
Protein-bound Glu+Gln	HSDH activity without effectors	0.1316	0.7171
Protein-bound Glu+Gln	<i>LKR-SDHI</i>	0.0939	0.7965
Protein-bound Glu+Gln	Lys-sensitive AK activity	0.1060	0.7708
Protein-bound Glu+Gln	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.3837	0.2737
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Ala</b>	<b>0.9207</b>	<b>0.0002</b>
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Arg</b>	<b>0.5445</b>	<b>0.1037</b>
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Asn+Asp+Ile+Lys+Thr</b>	<b>0.9514</b>	<b>&lt;.0001</b>
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Asp+Asn</b>	<b>0.8812</b>	<b>0.0008</b>
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Gly</b>	<b>0.8264</b>	<b>0.0032</b>
Protein-bound Glu+Gln	Protein-bound His	0.2950	0.4080
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Ile</b>	<b>0.5017</b>	<b>0.1395</b>
Protein-bound Glu+Gln	Protein-bound Leu	0.3613	0.3050
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Lys</b>	<b>0.4029</b>	<b>0.2483</b>
Protein-bound Glu+Gln	Protein-bound Phe	0.3540	0.3156
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Pro</b>	<b>0.9550</b>	<b>&lt;.0001</b>
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Ser</b>	<b>0.8758</b>	<b>0.0009</b>
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Thr</b>	<b>0.9316</b>	<b>&lt;.0001</b>
<b>Protein-bound Glu+Gln</b>	<b>Protein-bound Tyr</b>	<b>0.6497</b>	<b>0.0420</b>

Protein-bound Glu+Gln	Protein-bound Val	0.3071	0.3880
Protein-bound Glu+Gln	<i>SAMS1</i>	-0.2575	0.4726
Protein-bound Glu+Gln	<i>SAMS2</i>	-0.1428	0.6939
Protein-bound Glu+Gln	<i>SAMS3</i>	0.0887	0.8075
Protein-bound Glu+Gln	<i>SAMS4</i>	0.0499	0.8911
Protein-bound Glu+Gln	<i>SAMSs</i>	-0.0202	0.9559
Protein-bound Glu+Gln	<i>TD1</i>	-0.2091	0.5620
<b>Protein-bound Glu+Gln</b>	<b><i>TD1/BCAT1</i></b>	<b>-0.5687</b>	<b>0.0863</b>
<b>Protein-bound Glu+Gln</b>	<b><i>THA1</i></b>	<b>0.4209</b>	<b>0.2258</b>
Protein-bound Glu+Gln	<i>THA2</i>	-0.2756	0.4408
Protein-bound Glu+Gln	<i>THAs</i>	-0.2755	0.4410
Protein-bound Glu+Gln	<i>THAs+TD1</i>	-0.2452	0.4947
<b>Protein-bound Glu+Gln</b>	<b>Thr-sensitive AK activity</b>	<b>0.6391</b>	<b>0.0466</b>
<b>Protein-bound Glu+Gln</b>	<b>Total free AAs</b>	<b>-0.5362</b>	<b>0.1101</b>
<b>Protein-bound Glu+Gln</b>	<b>Total protein-bound AAs</b>	<b>0.9787</b>	<b>&lt;.0001</b>
Protein-bound Glu+Gln	<i>TS1</i>	0.1431	0.6933
<b>Protein-bound Glu+Gln</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>0.5142</b>	<b>0.1284</b>
Protein-bound Glu+Gln	<i>TS1/TD1</i>	0.3351	0.3439
Protein-bound Glu+Gln	<i>TS1/THAs</i>	0.1108	0.7606
Protein-bound Gly	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.3192	0.3687
Protein-bound Gly	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.3434	0.3312
Protein-bound Gly	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.3255	0.3587
Protein-bound Gly	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2565	0.4744
Protein-bound Gly	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.1780	0.6228
Protein-bound Gly	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.0922	0.8001
Protein-bound Gly	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1887	0.6015
Protein-bound Gly	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.3420	0.3333
Protein-bound Gly	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.0279	0.9391
Protein-bound Gly	AK activity with four effectors	0.1867	0.6055
Protein-bound Gly	AK activity without effectors	0.3939	0.2600
Protein-bound Gly	AK activity/HSDH activity with four effectors	0.1263	0.7282
Protein-bound Gly	AK activity/HSDH activity without effectors	-0.0624	0.8639
Protein-bound Gly	<i>AK1</i>	-0.0721	0.8431
Protein-bound Gly	<i>AK1+AK2</i>	-0.0616	0.8658
Protein-bound Gly	<i>AK1+AK3</i>	-0.0828	0.8201
Protein-bound Gly	<i>AK2</i>	-0.0455	0.9007
Protein-bound Gly	<i>AK2+AK3</i>	-0.0483	0.8946
Protein-bound Gly	<i>AK3</i>	-0.0325	0.9289
<b>Protein-bound Gly</b>	<b><i>AK-HSDHI</i></b>	<b>0.6040</b>	<b>0.0644</b>
Protein-bound Gly	<i>AK-HSDH2</i>	-0.1486	0.6820
Protein-bound Gly	<i>AK-HSDHs</i>	0.2415	0.5014
Protein-bound Gly	<i>AK-HSDHs+CGS1</i>	0.0909	0.8027
<b>Protein-bound Gly</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.4076</b>	<b>0.2423</b>
Protein-bound Gly	<i>AK-HSDHs+TS1+TD1</i>	0.3841	0.2731
<b>Protein-bound Gly</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>0.4054</b>	<b>0.2452</b>
Protein-bound Gly	<i>AKs</i>	-0.0668	0.8544
Protein-bound Gly	<i>AKs/AK-HSDHs</i>	-0.2565	0.4744
Protein-bound Gly	<i>AKs+AK-HSDHs</i>	-0.0059	0.9870
Protein-bound Gly	<i>AKs+AK-HSDHs+CGS1</i>	-0.0245	0.9465
Protein-bound Gly	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0003	0.9994
Protein-bound Gly	<i>AKs+AK-HSDHs+TS1</i>	0.1971	0.5853
Protein-bound Gly	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.1948	0.5897
Protein-bound Gly	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.1949	0.5895
Protein-bound Gly	<i>AKs+DHDPSs</i>	-0.0615	0.8660
<b>Protein-bound Gly</b>	<b><i>BCAT1</i></b>	<b>0.5063</b>	<b>0.1353</b>
Protein-bound Gly	Biosynthetic genes analyzed	0.1674	0.6440
Protein-bound Gly	Catabolic genes analyzed	0.2093	0.5617

Protein-bound Gly	<i>CGSI</i>	-0.0855	0.8143
<b>Protein-bound Gly</b>	<b><i>CGSI/SAMSs</i></b>	<b>-0.4095</b>	<b>0.2399</b>
<b>Protein-bound Gly</b>	<b><i>CGSI/TSI</i></b>	<b>-0.6599</b>	<b>0.0379</b>
Protein-bound Gly	<i>DHDPS1</i>	0.1144	0.7530
Protein-bound Gly	<i>DHDPS2</i>	0.0673	0.8534
Protein-bound Gly	<i>DHDPSs</i>	0.1226	0.7357
Protein-bound Gly	<i>DHDPSs/AK-HSDHs</i>	-0.2819	0.4300
Protein-bound Gly	<i>DHDPSs/LKR-SDHI</i>	0.1697	0.6392
<b>Protein-bound Gly</b>	<b>Free (Lys+Met+Thr+Ile)/Asp</b>	<b>0.5014</b>	<b>0.1398</b>
Protein-bound Gly	Free Ala	-0.0877	0.8095
<b>Protein-bound Gly</b>	<b>Free Arg</b>	<b>-0.4151</b>	<b>0.2330</b>
Protein-bound Gly	Free Asn	-0.3413	0.3345
<b>Protein-bound Gly</b>	<b>Free Asn+Asp</b>	<b>-0.4121</b>	<b>0.2366</b>
Protein-bound Gly	Free Asn+Asp+Lys+Met+Thr+Ile	0.0943	0.7955
Protein-bound Gly	Free Asn+Asp+Lys+Thr+Ile	0.0991	0.7853
<b>Protein-bound Gly</b>	<b>Free Asp</b>	<b>-0.4189</b>	<b>0.2283</b>
Protein-bound Gly	Free Asp+Lys+Met+Thr+Ile	0.1231	0.7347
Protein-bound Gly	Free Cys	0.1261	0.7285
Protein-bound Gly	Free Gln	-0.3469	0.3261
<b>Protein-bound Gly</b>	<b>Free Glu</b>	<b>-0.4697</b>	<b>0.1708</b>
Protein-bound Gly	Free Gly	-0.0720	0.8432
Protein-bound Gly	Free Gly/Thr	-0.1159	0.7499
Protein-bound Gly	Free Gly+Ile	-0.0623	0.8642
Protein-bound Gly	Free His	-0.3132	0.3783
Protein-bound Gly	Free Ile	0.1415	0.6966
Protein-bound Gly	Free Ile/Thr	-0.0943	0.7956
Protein-bound Gly	Free Leu	-0.2664	0.4569
<b>Protein-bound Gly</b>	<b>Free Lys</b>	<b>-0.4220</b>	<b>0.2245</b>
Protein-bound Gly	Free Lys/(Met+Thr+Ile)	-0.1742	0.6303
Protein-bound Gly	Free Lys/Asp	0.1809	0.6170
Protein-bound Gly	Free Lys/Thr	-0.1537	0.6716
Protein-bound Gly	Free Lys+Met+Thr+Ile	0.3070	0.3883
<b>Protein-bound Gly</b>	<b>Free Met</b>	<b>-0.5764</b>	<b>0.0812</b>
Protein-bound Gly	Free Met/(Thr+Ile)	-0.1977	0.5840
Protein-bound Gly	Free Met/Thr	-0.1633	0.6521
Protein-bound Gly	Free Met+Thr+Ile	0.3220	0.3642
Protein-bound Gly	Free Phe	-0.1608	0.6571
<b>Protein-bound Gly</b>	<b>Free Pro</b>	<b>-0.4684</b>	<b>0.1721</b>
Protein-bound Gly	Free Ser	-0.0973	0.7891
Protein-bound Gly	Free Thr	0.3267	0.3569
Protein-bound Gly	Free Thr/(Gly+Ile)	0.3017	0.3968
<b>Protein-bound Gly</b>	<b>Free Thr/Asp</b>	<b>0.4983</b>	<b>0.1427</b>
Protein-bound Gly	Free Trp	-0.0720	0.8432
Protein-bound Gly	Free Tyr	-0.2585	0.4708
Protein-bound Gly	Free Val	0.0028	0.9938
Protein-bound Gly	HSDH activity with four effectors	-0.0185	0.9595
Protein-bound Gly	HSDH activity without effectors	0.2637	0.4617
Protein-bound Gly	<i>LKR-SDHI</i>	0.0361	0.9211
Protein-bound Gly	Lys-sensitive AK activity	0.3418	0.3338
Protein-bound Gly	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.3211	0.3656
<b>Protein-bound Gly</b>	<b>Protein-bound Ala</b>	<b>0.9551</b>	<b>&lt;.0001</b>
Protein-bound Gly	Protein-bound Arg	0.1615	0.6558
Protein-bound Gly	<i>SAMS1</i>	-0.2467	0.4920
Protein-bound Gly	<i>SAMS2</i>	0.0973	0.7892
Protein-bound Gly	<i>SAMS3</i>	0.3361	0.3424
Protein-bound Gly	<i>SAMS4</i>	0.2578	0.4720
Protein-bound Gly	<i>SAMSs</i>	0.2049	0.5701
Protein-bound Gly	<i>TD1</i>	0.0519	0.8868

Protein-bound Gly	<i>TD1/BCAT1</i>	-0.3303	0.3513
Protein-bound Gly	<i>THA1</i>	0.2086	0.5630
Protein-bound Gly	<i>THA2</i>	-0.0922	0.7999
Protein-bound Gly	<i>THAs</i>	-0.1008	0.7817
Protein-bound Gly	<i>THAs+TD1</i>	0.0401	0.9124
<b>Protein-bound Gly</b>	<b>Thr-sensitive AK activity</b>	<b>0.4585</b>	<b>0.1826</b>
Protein-bound Gly	Total free AAs	-0.3043	0.3926
<b>Protein-bound Gly</b>	<b><i>TS1</i></b>	<b>0.4272</b>	<b>0.2182</b>
Protein-bound Gly	<i>TS1/(THAs+TD1)</i>	0.3752	0.2854
Protein-bound Gly	<i>TS1/TD1</i>	0.2072	0.5657
Protein-bound Gly	<i>TS1/THAs</i>	0.2945	0.4088
Protein-bound His	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.0178	0.9610
Protein-bound His	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0956	0.7929
<b>Protein-bound His</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.6193</b>	<b>0.0562</b>
Protein-bound His	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.3731	0.2882
Protein-bound His	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.2662	0.4572
Protein-bound His	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.1458	0.6877
Protein-bound His	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.3283	0.3544
<b>Protein-bound His</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.5980</b>	<b>0.0678</b>
Protein-bound His	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.2614	0.4656
Protein-bound His	AK activity with four effectors	0.1676	0.6435
Protein-bound His	AK activity without effectors	0.1769	0.6249
<b>Protein-bound His</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.6200</b>	<b>0.0559</b>
<b>Protein-bound His</b>	<b>AK activity/HSDH activity without effectors</b>	<b>0.6975</b>	<b>0.0249</b>
Protein-bound His	<i>AK1</i>	-0.3238	0.3614
Protein-bound His	<i>AK1+AK2</i>	0.2297	0.5231
Protein-bound His	<i>AK1+AK3</i>	-0.0487	0.8937
Protein-bound His	<i>AK2</i>	0.2888	0.4183
Protein-bound His	<i>AK2+AK3</i>	0.3351	0.3440
Protein-bound His	<i>AK3</i>	0.3141	0.3768
Protein-bound His	<i>AK-HSDH1</i>	-0.3185	0.3698
Protein-bound His	<i>AK-HSDH2</i>	-0.2034	0.5730
Protein-bound His	<i>AK-HSDHs</i>	-0.3160	0.3738
Protein-bound His	<i>AK-HSDHs+CGS1</i>	-0.2931	0.4112
Protein-bound His	<i>AK-HSDHs+TS1</i>	-0.3319	0.3488
Protein-bound His	<i>AK-HSDHs+TS1+TD1</i>	-0.3422	0.3331
Protein-bound His	<i>AK-HSDHs+TS1+THAs</i>	-0.3322	0.3483
Protein-bound His	<i>AKs</i>	0.2826	0.4289
Protein-bound His	<i>AKs/AK-HSDHs</i>	0.3731	0.2882
Protein-bound His	<i>AKs+AK-HSDHs</i>	0.2092	0.5619
Protein-bound His	<i>AKs+AK-HSDHs+CGS1</i>	0.1504	0.6784
Protein-bound His	<i>AKs+AK-HSDHs+DHDPSs</i>	0.1890	0.6010
Protein-bound His	<i>AKs+AK-HSDHs+TS1</i>	0.0247	0.9460
Protein-bound His	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.0031	0.9933
Protein-bound His	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.0261	0.9429
Protein-bound His	<i>AKs+DHDPSs</i>	0.2623	0.4641
<b>Protein-bound His</b>	<b><i>BCAT1</i></b>	<b>0.4756</b>	<b>0.1648</b>
Protein-bound His	Biosynthetic genes analyzed	-0.0264	0.9423
Protein-bound His	Catabolic genes analyzed	-0.2817	0.4304
Protein-bound His	<i>CGS1</i>	-0.2075	0.5651
Protein-bound His	<i>CGS1/SAMSs</i>	0.1536	0.6718
Protein-bound His	<i>CGS1/TS1</i>	0.2912	0.4143
<b>Protein-bound His</b>	<b><i>DHDPS1</i></b>	<b>-0.6120</b>	<b>0.0600</b>
Protein-bound His	<i>DHDPS2</i>	-0.1811	0.6166
<b>Protein-bound His</b>	<b><i>DHDPSs</i></b>	<b>-0.4872</b>	<b>0.1532</b>
Protein-bound His	<i>DHDPSs/AK-HSDHs</i>	0.1947	0.5899
Protein-bound His	<i>DHDPSs/LKR-SDHI</i>	-0.2652	0.4589

Protein-bound His	Free (Lys+Met+Thr+Ile)/Asp	0.1151	0.7516
Protein-bound His	Free Ala	-0.3320	0.3487
<b>Protein-bound His</b>	<b>Free Arg</b>	<b>-0.6498</b>	<b>0.0420</b>
<b>Protein-bound His</b>	<b>Free Asn</b>	<b>-0.4860</b>	<b>0.1544</b>
Protein-bound His	Free Asn+Asp	-0.3605	0.3062
Protein-bound His	Free Asn+Asp+Lys+Met+Thr+Ile	-0.2050	0.5699
Protein-bound His	Free Asn+Asp+Lys+Thr+Ile	-0.2025	0.5747
Protein-bound His	Free Asp	-0.3363	0.3420
Protein-bound His	Free Asp+Lys+Met+Thr+Ile	-0.1806	0.6177
Protein-bound His	Free Cys	-0.2998	0.4000
<b>Protein-bound His</b>	<b>Free Gln</b>	<b>-0.4888</b>	<b>0.1517</b>
Protein-bound His	Free Glu	-0.0785	0.8294
<b>Protein-bound His</b>	<b>Free Gly</b>	<b>-0.4339</b>	<b>0.2102</b>
Protein-bound His	Free Gly/Thr	-0.2116	0.5573
<b>Protein-bound His</b>	<b>Free Gly+Ile</b>	<b>-0.4624</b>	<b>0.1784</b>
<b>Protein-bound His</b>	<b>Free His</b>	<b>-0.4534</b>	<b>0.1882</b>
<b>Protein-bound His</b>	<b>Free Ile</b>	<b>-0.5204</b>	<b>0.1230</b>
Protein-bound His	Free Ile/Thr	-0.1041	0.7747
<b>Protein-bound His</b>	<b>Free Leu</b>	<b>-0.5795</b>	<b>0.0791</b>
<b>Protein-bound His</b>	<b>Free Lys</b>	<b>-0.5493</b>	<b>0.1001</b>
Protein-bound His	Free Lys/(Met+Thr+Ile)	-0.1849	0.6091
Protein-bound His	Free Lys/Asp	-0.2456	0.4940
Protein-bound His	Free Lys/Thr	-0.1605	0.6579
Protein-bound His	Free Lys+Met+Thr+Ile	-0.0448	0.9023
Protein-bound His	Free Met	-0.3610	0.3055
Protein-bound His	Free Met/(Thr+Ile)	-0.2534	0.4799
Protein-bound His	Free Met/Thr	-0.1232	0.7346
Protein-bound His	Free Met+Thr+Ile	-0.0245	0.9463
<b>Protein-bound His</b>	<b>Free Phe</b>	<b>-0.5017</b>	<b>0.1396</b>
Protein-bound His	Free Pro	-0.3877	0.2683
<b>Protein-bound His</b>	<b>Free Ser</b>	<b>-0.4325</b>	<b>0.2119</b>
Protein-bound His	Free Thr	-0.0109	0.9762
Protein-bound His	Free Thr/(Gly+Ile)	0.0627	0.8634
Protein-bound His	Free Thr/Asp	0.1220	0.7371
<b>Protein-bound His</b>	<b>Free Trp</b>	<b>-0.5908</b>	<b>0.0721</b>
<b>Protein-bound His</b>	<b>Free Tyr</b>	<b>-0.4951</b>	<b>0.1457</b>
Protein-bound His	Free Val	-0.2115	0.5575
<b>Protein-bound His</b>	<b>HSDH activity with four effectors</b>	<b>-0.6942</b>	<b>0.0259</b>
<b>Protein-bound His</b>	<b>HSDH activity without effectors</b>	<b>-0.6987</b>	<b>0.0246</b>
Protein-bound His	<i>LKR-SDHI</i>	0.0183	0.9601
Protein-bound His	Lys-sensitive AK activity	0.3729	0.2885
Protein-bound His	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.0050	0.9890
Protein-bound His	Protein-bound Ala	0.2058	0.5684
<b>Protein-bound His</b>	<b>Protein-bound Arg</b>	<b>0.6340</b>	<b>0.0490</b>
Protein-bound His	Protein-bound Gly	0.1082	0.7661
Protein-bound His	<i>SAMS1</i>	-0.2504	0.4853
<b>Protein-bound His</b>	<b><i>SAMS2</i></b>	<b>-0.4113</b>	<b>0.2376</b>
Protein-bound His	<i>SAMS3</i>	-0.2105	0.5594
Protein-bound His	<i>SAMS4</i>	-0.1902	0.5986
Protein-bound His	<i>SAMSs</i>	-0.2828	0.4286
Protein-bound His	<i>TD1</i>	-0.3384	0.3389
<b>Protein-bound His</b>	<b><i>TD1/BCAT1</i></b>	<b>-0.6394</b>	<b>0.0465</b>
Protein-bound His	<i>THA1</i>	0.0371	0.9190
Protein-bound His	<i>THA2</i>	-0.0485	0.8942
Protein-bound His	<i>THAs</i>	0.0095	0.9792
Protein-bound His	<i>THAs+TD1</i>	-0.3388	0.3383
Protein-bound His	Thr-sensitive AK activity	0.2737	0.4442
Protein-bound His	Total free AAs	-0.3695	0.2933

Protein-bound His	<i>TS1</i>	-0.2958	0.4067
Protein-bound His	<i>TS1/(THAs+TD1)</i>	0.1787	0.6214
Protein-bound His	<i>TS1/TD1</i>	0.1936	0.5921
<b>Protein-bound His</b>	<b><i>TS1/THAs</i></b>	<b>-0.4934</b>	<b>0.1473</b>
Protein-bound Ile	<i>(AK-HSDHs+CGS1)/SAMs</i>	0.1945	0.5903
Protein-bound Ile	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.3037	0.3936
Protein-bound Ile	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.2918	0.4133
Protein-bound Ile	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.3042	0.3929
Protein-bound Ile	<i>(AKs+AK-HSDHs+CGS1)/SAMs</i>	0.2930	0.4113
Protein-bound Ile	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.1838	0.6112
<b>Protein-bound Ile</b>	<b><i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>0.4278</b>	<b>0.2175</b>
Protein-bound Ile	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.2811	0.4314
Protein-bound Ile	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0584	0.8728
Protein-bound Ile	AK activity with four effectors	-0.0559	0.8780
Protein-bound Ile	AK activity without effectors	0.0616	0.8657
Protein-bound Ile	AK activity/HSDH activity with four effectors	0.2823	0.4293
Protein-bound Ile	AK activity/HSDH activity without effectors	0.2116	0.5573
Protein-bound Ile	<i>AK1</i>	-0.0902	0.8043
Protein-bound Ile	<i>AK1+AK2</i>	0.1752	0.6283
Protein-bound Ile	<i>AK1+AK3</i>	-0.3812	0.2771
Protein-bound Ile	<i>AK2</i>	0.1867	0.6054
Protein-bound Ile	<i>AK2+AK3</i>	0.1165	0.7485
Protein-bound Ile	<i>AK3</i>	-0.3758	0.2845
Protein-bound Ile	<i>AK-HSDH1</i>	-0.2269	0.5285
<b>Protein-bound Ile</b>	<b><i>AK-HSDH2</i></b>	<b>-0.6624</b>	<b>0.0369</b>
<b>Protein-bound Ile</b>	<b><i>AK-HSDHs</i></b>	<b>-0.5592</b>	<b>0.0928</b>
<b>Protein-bound Ile</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>-0.6000</b>	<b>0.0667</b>
<b>Protein-bound Ile</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>-0.5023</b>	<b>0.1390</b>
<b>Protein-bound Ile</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>-0.5366</b>	<b>0.1098</b>
<b>Protein-bound Ile</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>-0.5008</b>	<b>0.1403</b>
Protein-bound Ile	<i>AKs</i>	0.1034	0.7762
Protein-bound Ile	<i>AKs/AK-HSDHs</i>	0.3042	0.3929
Protein-bound Ile	<i>AKs+AK-HSDHs</i>	-0.0414	0.9096
Protein-bound Ile	<i>AKs+AK-HSDHs+CGS1</i>	-0.1575	0.6640
Protein-bound Ile	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0645	0.8595
Protein-bound Ile	<i>AKs+AK-HSDHs+TS1</i>	-0.2249	0.5322
Protein-bound Ile	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.2634	0.4621
Protein-bound Ile	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.2226	0.5364
Protein-bound Ile	<i>AKs+DHDPSs</i>	0.0783	0.8297
<b>Protein-bound Ile</b>	<b><i>BCAT1</i></b>	<b>0.6979</b>	<b>0.0248</b>
Protein-bound Ile	Biosynthetic genes analyzed	-0.3096	0.3839
<b>Protein-bound Ile</b>	<b>Catabolic genes analyzed</b>	<b>-0.6489</b>	<b>0.0424</b>
<b>Protein-bound Ile</b>	<b><i>CGS1</i></b>	<b>-0.5245</b>	<b>0.1196</b>
Protein-bound Ile	<i>CGS1/SAMs</i>	0.3597	0.3073
Protein-bound Ile	<i>CGS1/TS1</i>	0.0363	0.9206
Protein-bound Ile	<i>DHDPS1</i>	-0.3920	0.2626
<b>Protein-bound Ile</b>	<b><i>DHDPS2</i></b>	<b>-0.5553</b>	<b>0.0956</b>
<b>Protein-bound Ile</b>	<b><i>DHDPSs</i></b>	<b>-0.6264</b>	<b>0.0526</b>
Protein-bound Ile	<i>DHDPSs/AK-HSDHs</i>	0.3433	0.3314
<b>Protein-bound Ile</b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>-0.5395</b>	<b>0.1075</b>
Protein-bound Ile	Free (Lys+Met+Thr+Ile)/Asp	0.3108	0.3821
<b>Protein-bound Ile</b>	<b>Free Ala</b>	<b>-0.6710</b>	<b>0.0337</b>
<b>Protein-bound Ile</b>	<b>Free Arg</b>	<b>-0.8495</b>	<b>0.0019</b>
<b>Protein-bound Ile</b>	<b>Free Asn</b>	<b>-0.8236</b>	<b>0.0034</b>
<b>Protein-bound Ile</b>	<b>Free Asn+Asp</b>	<b>-0.6483</b>	<b>0.0426</b>
Protein-bound Ile	Free Asn+Asp+Lys+Met+Thr+Ile	-0.2360	0.5115
Protein-bound Ile	Free Asn+Asp+Lys+Thr+Ile	-0.2308	0.5211



<b>Protein-bound Ile</b>	<b>Free Asp</b>	<b>-0.6148</b>	<b>0.0586</b>
Protein-bound Ile	Free Asp+Lys+Met+Thr+Ile	-0.1868	0.6053
Protein-bound Ile	Free Cys	-0.1677	0.6433
<b>Protein-bound Ile</b>	<b>Free Gln</b>	<b>-0.8540</b>	<b>0.0017</b>
<b>Protein-bound Ile</b>	<b>Free Glu</b>	<b>-0.4637</b>	<b>0.1770</b>
<b>Protein-bound Ile</b>	<b>Free Gly</b>	<b>-0.6445</b>	<b>0.0442</b>
Protein-bound Ile	Free Gly/Thr	-0.2186	0.5440
<b>Protein-bound Ile</b>	<b>Free Gly+Ile</b>	<b>-0.6668</b>	<b>0.0352</b>
<b>Protein-bound Ile</b>	<b>Free His</b>	<b>-0.8519</b>	<b>0.0018</b>
<b>Protein-bound Ile</b>	<b>Free Ile</b>	<b>-0.4568</b>	<b>0.1844</b>
Protein-bound Ile	Free Ile/Thr	-0.0734	0.8404
<b>Protein-bound Ile</b>	<b>Free Leu</b>	<b>-0.7143</b>	<b>0.0203</b>
<b>Protein-bound Ile</b>	<b>Free Lys</b>	<b>-0.6869</b>	<b>0.0282</b>
Protein-bound Ile	Free Lys/(Met+Thr+Ile)	-0.1844	0.6101
Protein-bound Ile	Free Lys/Asp	0.0804	0.8253
Protein-bound Ile	Free Lys/Thr	-0.1471	0.6850
Protein-bound Ile	Free Lys+Met+Thr+Ile	0.0681	0.8518
Protein-bound Ile	Free Met	-0.3988	0.2536
Protein-bound Ile	Free Met/(Thr+Ile)	-0.1189	0.7435
Protein-bound Ile	Free Met/Thr	-0.0519	0.8869
Protein-bound Ile	Free Met+Thr+Ile	0.0932	0.7979
<b>Protein-bound Ile</b>	<b>Free Phe</b>	<b>-0.7490</b>	<b>0.0127</b>
<b>Protein-bound Ile</b>	<b>Free Pro</b>	<b>-0.7175</b>	<b>0.0195</b>
<b>Protein-bound Ile</b>	<b>Free Ser</b>	<b>-0.6438</b>	<b>0.0445</b>
Protein-bound Ile	Free Thr	0.1055	0.7719
Protein-bound Ile	Free Thr/(Gly+Ile)	0.1864	0.6061
Protein-bound Ile	Free Thr/Asp	0.3097	0.3838
<b>Protein-bound Ile</b>	<b>Free Trp</b>	<b>-0.7280</b>	<b>0.0170</b>
<b>Protein-bound Ile</b>	<b>Free Tyr</b>	<b>-0.6170</b>	<b>0.0574</b>
<b>Protein-bound Ile</b>	<b>Free Val</b>	<b>-0.6546</b>	<b>0.0400</b>
<b>Protein-bound Ile</b>	<b>HSDH activity with four effectors</b>	<b>-0.6014</b>	<b>0.0659</b>
Protein-bound Ile	HSDH activity without effectors	-0.3172	0.3719
Protein-bound Ile	<i>LKR-SDHI</i>	0.2847	0.4253
<b>Protein-bound Ile</b>	<b>Lys-sensitive AK activity</b>	<b>0.4805</b>	<b>0.1598</b>
Protein-bound Ile	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.0928	0.7988
Protein-bound Ile	Protein-bound Ala	0.2682	0.4538
<b>Protein-bound Ile</b>	<b>Protein-bound Arg</b>	<b>0.9018</b>	<b>0.0004</b>
Protein-bound Ile	Protein-bound Gly	0.2953	0.4075
<b>Protein-bound Ile</b>	<b>Protein-bound His</b>	<b>0.5885</b>	<b>0.0735</b>
<b>Protein-bound Ile</b>	<b>SAMS1</b>	<b>-0.6498</b>	<b>0.0420</b>
<b>Protein-bound Ile</b>	<b>SAMS2</b>	<b>-0.6003</b>	<b>0.0665</b>
<b>Protein-bound Ile</b>	<b>SAMS3</b>	<b>-0.4073</b>	<b>0.2427</b>
<b>Protein-bound Ile</b>	<b>SAMS4</b>	<b>-0.6319</b>	<b>0.0500</b>
<b>Protein-bound Ile</b>	<b>SAMSs</b>	<b>-0.6491</b>	<b>0.0423</b>
<b>Protein-bound Ile</b>	<b>TD1</b>	<b>-0.7182</b>	<b>0.0193</b>
Protein-bound Ile	<i>TD1/BCAT1</i>	-0.3489	0.3231
<b>Protein-bound Ile</b>	<b>THA1</b>	<b>0.5449</b>	<b>0.1033</b>
Protein-bound Ile	<i>THA2</i>	-0.0888	0.8072
Protein-bound Ile	<i>THAs</i>	-0.0200	0.9563
<b>Protein-bound Ile</b>	<b>THAs+TD1</b>	<b>-0.7005</b>	<b>0.0241</b>
Protein-bound Ile	Thr-sensitive AK activity	0.1533	0.6725
<b>Protein-bound Ile</b>	<b>Total free AAs</b>	<b>-0.7125</b>	<b>0.0208</b>
<b>Protein-bound Ile</b>	<b>TS1</b>	<b>-0.4082</b>	<b>0.2416</b>
<b>Protein-bound Ile</b>	<b>TS1/(THAs+TD1)</b>	<b>0.5279</b>	<b>0.1168</b>
Protein-bound Ile	<i>TS1/TD1</i>	0.3829	0.2748
<b>Protein-bound Ile</b>	<b>TS1/THAs</b>	<b>-0.6397</b>	<b>0.0464</b>
Protein-bound Leu	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.0056	0.9878
Protein-bound Leu	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1614	0.6560

Protein-bound Leu	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.2065	0.5671
Protein-bound Leu	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.0202	0.9558
Protein-bound Leu	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.1705	0.6376
<b>Protein-bound Leu</b>	<b><i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i></b>	<b>0.5091</b>	<b>0.1328</b>
Protein-bound Leu	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.2871	0.4212
Protein-bound Leu	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1977	0.5839
<b>Protein-bound Leu</b>	<b><i>(AKs+DHDPSs)/LKR-SDHI</i></b>	<b>0.5234</b>	<b>0.1205</b>
Protein-bound Leu	AK activity with four effectors	0.3597	0.3072
Protein-bound Leu	AK activity without effectors	0.3611	0.3053
<b>Protein-bound Leu</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.4277</b>	<b>0.2176</b>
<b>Protein-bound Leu</b>	<b>AK activity/HSDH activity without effectors</b>	<b>0.4719</b>	<b>0.1685</b>
<b>Protein-bound Leu</b>	<b>AK1</b>	<b>-0.4601</b>	<b>0.1809</b>
Protein-bound Leu	<i>AK1+AK2</i>	0.3005	0.3989
Protein-bound Leu	<i>AK1+AK3</i>	-0.1524	0.6743
Protein-bound Leu	<i>AK2</i>	0.3853	0.2715
<b>Protein-bound Leu</b>	<b><i>AK2+AK3</i></b>	<b>0.4336</b>	<b>0.2106</b>
Protein-bound Leu	<i>AK3</i>	0.3350	0.3440
Protein-bound Leu	<i>AK-HSDH1</i>	0.2052	0.5695
Protein-bound Leu	<i>AK-HSDH2</i>	0.3045	0.3923
Protein-bound Leu	<i>AK-HSDHs</i>	0.3116	0.3808
Protein-bound Leu	<i>AK-HSDHs+CGS1</i>	0.2780	0.4368
Protein-bound Leu	<i>AK-HSDHs+TS1</i>	0.3521	0.3184
Protein-bound Leu	<i>AK-HSDHs+TS1+TD1</i>	0.3450	0.3289
Protein-bound Leu	<i>AK-HSDHs+TS1+THAs</i>	0.3480	0.3244
Protein-bound Leu	<i>AKs</i>	0.3551	0.3140
Protein-bound Leu	<i>AKs/AK-HSDHs</i>	-0.0202	0.9558
<b>Protein-bound Leu</b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.4504</b>	<b>0.1915</b>
<b>Protein-bound Leu</b>	<b><i>AKs+AK-HSDHs+CGS1</i></b>	<b>0.4704</b>	<b>0.1701</b>
<b>Protein-bound Leu</b>	<b><i>AKs+AK-HSDHs+DHDPSs</i></b>	<b>0.4523</b>	<b>0.1894</b>
<b>Protein-bound Leu</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>0.5057</b>	<b>0.1359</b>
<b>Protein-bound Leu</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>0.5039</b>	<b>0.1375</b>
<b>Protein-bound Leu</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>0.5018</b>	<b>0.1395</b>
Protein-bound Leu	<i>AKs+DHDPSs</i>	0.3598	0.3071
Protein-bound Leu	<i>BCAT1</i>	0.2006	0.5783
<b>Protein-bound Leu</b>	<b>Biosynthetic genes analyzed</b>	<b>0.4946</b>	<b>0.1461</b>
Protein-bound Leu	Catabolic genes analyzed	0.2167	0.5477
Protein-bound Leu	<i>CGS1</i>	0.1967	0.5860
Protein-bound Leu	<i>CGS1/SAMSs</i>	-0.1949	0.5895
Protein-bound Leu	<i>CGS1/TS1</i>	-0.1135	0.7550
Protein-bound Leu	<i>DHDPS1</i>	-0.2404	0.5035
Protein-bound Leu	<i>DHDPS2</i>	0.3701	0.2925
Protein-bound Leu	<i>DHDPSs</i>	0.1142	0.7534
Protein-bound Leu	<i>DHDPSs/AK-HSDHs</i>	-0.3573	0.3107
Protein-bound Leu	<i>DHDPSs/LKR-SDHI</i>	0.3015	0.3972
Protein-bound Leu	Free (Lys+Met+Thr+Ile)/Asp	0.0353	0.9229
Protein-bound Leu	Free Ala	0.1756	0.6275
Protein-bound Leu	Free Arg	-0.2810	0.4316
Protein-bound Leu	Free Asn	-0.1142	0.7534
Protein-bound Leu	Free Asn+Asp	-0.1804	0.6180
Protein-bound Leu	Free Asn+Asp+Lys+Met+Thr+Ile	-0.1208	0.7396
Protein-bound Leu	Free Asn+Asp+Lys+Thr+Ile	-0.1209	0.7393
Protein-bound Leu	Free Asp	-0.1933	0.5927
Protein-bound Leu	Free Asp+Lys+Met+Thr+Ile	-0.1184	0.7445
Protein-bound Leu	Free Cys	-0.1839	0.6111
Protein-bound Leu	Free Gln	-0.1563	0.6663
Protein-bound Leu	Free Glu	-0.0765	0.8336
Protein-bound Leu	Free Gly	-0.0754	0.8360

Protein-bound Leu	Free Gly/Thr	-0.1529	0.6731
Protein-bound Leu	Free Gly+Ile	-0.0818	0.8222
Protein-bound Leu	Free His	-0.0514	0.8879
Protein-bound Leu	Free Ile	-0.1142	0.7533
Protein-bound Leu	Free Ile/Thr	-0.0222	0.9514
Protein-bound Leu	Free Leu	-0.0731	0.8410
Protein-bound Leu	Free Lys	-0.1412	0.6972
Protein-bound Leu	Free Lys/(Met+Thr+Ile)	-0.0247	0.9461
Protein-bound Leu	Free Lys/Asp	0.0521	0.8863
Protein-bound Leu	Free Lys/Thr	-0.0438	0.9043
Protein-bound Leu	Free Lys+Met+Thr+Ile	-0.0431	0.9059
<b>Protein-bound Leu</b>	<b>Free Met</b>	<b>-0.4093</b>	<b>0.2402</b>
Protein-bound Leu	Free Met/(Thr+Ile)	-0.1661	0.6465
Protein-bound Leu	Free Met/Thr	-0.1076	0.7674
Protein-bound Leu	Free Met+Thr+Ile	-0.0379	0.9173
Protein-bound Leu	Free Phe	0.0854	0.8145
Protein-bound Leu	Free Pro	-0.1220	0.7371
Protein-bound Leu	Free Ser	-0.0779	0.8307
Protein-bound Leu	Free Thr	-0.0351	0.9233
Protein-bound Leu	Free Thr/(Gly+Ile)	-0.0946	0.7949
Protein-bound Leu	Free Thr/Asp	0.0299	0.9346
Protein-bound Leu	Free Trp	0.0050	0.9891
Protein-bound Leu	Free Tyr	-0.0519	0.8868
Protein-bound Leu	Free Val	0.2932	0.4110
Protein-bound Leu	HSDH activity with four effectors	-0.0814	0.8232
Protein-bound Leu	HSDH activity without effectors	-0.2047	0.5705
Protein-bound Leu	<i>LKR-SDHI</i>	-0.1825	0.6137
Protein-bound Leu	Lys-sensitive AK activity	0.3209	0.3659
<b>Protein-bound Leu</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.4645</b>	<b>0.1762</b>
<b>Protein-bound Leu</b>	<b>Protein-bound Ala</b>	<b>0.5199</b>	<b>0.1235</b>
Protein-bound Leu	Protein-bound Arg	0.1315	0.7172
<b>Protein-bound Leu</b>	<b>Protein-bound Gly</b>	<b>0.5412</b>	<b>0.1062</b>
<b>Protein-bound Leu</b>	<b>Protein-bound His</b>	<b>0.5387</b>	<b>0.1081</b>
Protein-bound Leu	Protein-bound Ile	0.2440	0.4970
Protein-bound Leu	<i>SAMS1</i>	0.0074	0.9839
Protein-bound Leu	<i>SAMS2</i>	0.0298	0.9348
Protein-bound Leu	<i>SAMS3</i>	0.2026	0.5745
Protein-bound Leu	<i>SAMS4</i>	0.3530	0.3170
Protein-bound Leu	<i>SAMSs</i>	0.2138	0.5531
Protein-bound Leu	<i>TD1</i>	0.2075	0.5652
Protein-bound Leu	<i>TD1/BCAT1</i>	-0.2037	0.5725
Protein-bound Leu	<i>THA1</i>	0.0093	0.9797
Protein-bound Leu	<i>THA2</i>	-0.0838	0.8180
Protein-bound Leu	<i>THAs</i>	-0.0788	0.8286
Protein-bound Leu	<i>THAs+TD1</i>	0.1786	0.6214
<b>Protein-bound Leu</b>	<b>Thr-sensitive AK activity</b>	<b>0.5374</b>	<b>0.1092</b>
Protein-bound Leu	Total free AAs	-0.1152	0.7513
Protein-bound Leu	<i>TS1</i>	0.3230	0.3627
Protein-bound Leu	<i>TS1/(THAs+TD1)</i>	0.0852	0.8150
Protein-bound Leu	<i>TS1/TD1</i>	0.0646	0.8593
Protein-bound Leu	<i>TS1/THAs</i>	0.1059	0.7709
Protein-bound Lys	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.2355	0.5124
Protein-bound Lys	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0834	0.8189
Protein-bound Lys	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.2800	0.4333
Protein-bound Lys	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.1139	0.7540
Protein-bound Lys	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.0756	0.8355
Protein-bound Lys	<i>(AKs+AK-HSDHs+DHDPs)/LKR-SDHI</i>	-0.2335	0.5162

Protein-bound Lys	$(AKs+AK-HSDHs+TS1)/(THAs+TD1)$	0.0670	0.8540
Protein-bound Lys	$(AKs+AK-HSDHs+TS1+TD1)/BCAT1$	-0.2742	0.4432
Protein-bound Lys	$(AKs+DHDPSs)/LKR-SDH1$	-0.1769	0.6248
Protein-bound Lys	AK activity with four effectors	-0.3159	0.3739
Protein-bound Lys	AK activity without effectors	-0.2423	0.5000
Protein-bound Lys	AK activity/HSDH activity with four effectors	-0.0097	0.9788
Protein-bound Lys	AK activity/HSDH activity without effectors	0.1034	0.7761
Protein-bound Lys	<i>AK1</i>	-0.3802	0.2785
Protein-bound Lys	<i>AK1+AK2</i>	-0.1296	0.7212
Protein-bound Lys	<i>AK1+AK3</i>	-0.2645	0.4602
Protein-bound Lys	<i>AK2</i>	-0.0467	0.8980
Protein-bound Lys	<i>AK2+AK3</i>	-0.0261	0.9430
Protein-bound Lys	<i>AK3</i>	0.1174	0.7467
Protein-bound Lys	<i>AK-HSDH1</i>	-0.2667	0.4563
Protein-bound Lys	<i>AK-HSDH2</i>	-0.2985	0.4021
Protein-bound Lys	<i>AK-HSDHs</i>	-0.3458	0.3276
Protein-bound Lys	<i>AK-HSDHs+CGS1</i>	-0.3223	0.3637
Protein-bound Lys	<i>AK-HSDHs+TS1</i>	-0.2248	0.5324
Protein-bound Lys	<i>AK-HSDHs+TS1+TD1</i>	-0.2381	0.5077
Protein-bound Lys	<i>AK-HSDHs+TS1+THAs</i>	-0.2244	0.5332
Protein-bound Lys	<i>AKs</i>	-0.1068	0.7691
Protein-bound Lys	<i>AKs/AK-HSDHs</i>	0.1139	0.7540
Protein-bound Lys	<i>AKs+AK-HSDHs</i>	-0.2041	0.5717
Protein-bound Lys	<i>AKs+AK-HSDHs+CGS1</i>	-0.2444	0.4963
Protein-bound Lys	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.2154	0.5501
Protein-bound Lys	<i>AKs+AK-HSDHs+TS1</i>	-0.2255	0.5310
Protein-bound Lys	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.2381	0.5077
Protein-bound Lys	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.2250	0.5321
Protein-bound Lys	<i>AKs+DHDPSs</i>	-0.1203	0.7407
Protein-bound Lys	<i>BCAT1</i>	0.2954	0.4073
Protein-bound Lys	Biosynthetic genes analyzed	-0.2523	0.4818
<b>Protein-bound Lys</b>	<b>Catabolic genes analyzed</b>	<b>-0.4535</b>	<b>0.1881</b>
Protein-bound Lys	<i>CGS1</i>	-0.2330	0.5170
Protein-bound Lys	<i>CGS1/SAMSs</i>	0.3423	0.3329
Protein-bound Lys	<i>CGS1/TS1</i>	0.0104	0.9773
Protein-bound Lys	<i>DHDPS1</i>	-0.3399	0.3366
Protein-bound Lys	<i>DHDPS2</i>	-0.1854	0.6081
Protein-bound Lys	<i>DHDPSs</i>	-0.3487	0.3233
Protein-bound Lys	<i>DHDPSs/AK-HSDHs</i>	0.2836	0.4272
Protein-bound Lys	<i>DHDPSs/LKR-SDH1</i>	-0.3168	0.3725
Protein-bound Lys	Free (Lys+Met+Thr+Ile)/Asp	-0.2356	0.5123
Protein-bound Lys	Free Ala	-0.1381	0.7035
<b>Protein-bound Lys</b>	<b>Free Arg</b>	<b>-0.5062</b>	<b>0.1355</b>
<b>Protein-bound Lys</b>	<b>Free Asn</b>	<b>-0.4084</b>	<b>0.2413</b>
Protein-bound Lys	Free Asn+Asp	-0.1987	0.5820
Protein-bound Lys	Free Asn+Asp+Lys+Met+Thr+Ile	-0.3662	0.2980
Protein-bound Lys	Free Asn+Asp+Lys+Thr+Ile	-0.3663	0.2978
Protein-bound Lys	Free Asp	-0.1708	0.6371
Protein-bound Lys	Free Asp+Lys+Met+Thr+Ile	-0.3513	0.3196
<b>Protein-bound Lys</b>	<b>Free Cys</b>	<b>-0.5541</b>	<b>0.0965</b>
<b>Protein-bound Lys</b>	<b>Free Gln</b>	<b>-0.4828</b>	<b>0.1575</b>
Protein-bound Lys	Free Glu	-0.0867	0.8117
<b>Protein-bound Lys</b>	<b>Free Gly</b>	<b>-0.4479</b>	<b>0.1942</b>
Protein-bound Lys	Free Gly/Thr	0.2239	0.5341
<b>Protein-bound Lys</b>	<b>Free Gly+Ile</b>	<b>-0.4669</b>	<b>0.1737</b>
<b>Protein-bound Lys</b>	<b>Free His</b>	<b>-0.4054</b>	<b>0.2451</b>
Protein-bound Lys	Free Ile	-0.3727	0.2888

<b>Protein-bound Lys</b>	<b>Free Ile/Thr</b>	<b>0.4413</b>	<b>0.2017</b>
Protein-bound Lys	Free Leu	-0.2877	0.4203
Protein-bound Lys	Free Lys	-0.3161	0.3735
Protein-bound Lys	Free Lys/(Met+Thr+Ile)	0.3472	0.3256
Protein-bound Lys	Free Lys/Asp	-0.2571	0.4734
<b>Protein-bound Lys</b>	<b>Free Lys/Thr</b>	<b>-0.4097</b>	<b>0.2396</b>
Protein-bound Lys	Free Lys+Met+Thr+Ile	-0.2982	0.4026
Protein-bound Lys	Free Met	0.0142	0.9690
Protein-bound Lys	Free Met/(Thr+Ile)	0.3484	0.3239
<b>Protein-bound Lys</b>	<b>Free Met/Thr</b>	<b>0.4720</b>	<b>0.1684</b>
Protein-bound Lys	Free Met+Thr+Ile	-0.2862	0.4227
Protein-bound Lys	Free Phe	-0.2501	0.4859
Protein-bound Lys	Free Pro	-0.3633	0.3022
Protein-bound Lys	Free Ser	-0.3398	0.3367
Protein-bound Lys	Free Thr	-0.2778	0.4372
Protein-bound Lys	Free Thr/(Gly+Ile)	-0.2338	0.5156
Protein-bound Lys	Free Thr/Asp	-0.2308	0.5211
Protein-bound Lys	Free Trp	-0.3663	0.2979
Protein-bound Lys	Free Tyr	-0.1900	0.5990
Protein-bound Lys	Free Val	-0.0245	0.9465
<b>Protein-bound Lys</b>	<b>HSDH activity with four effectors</b>	<b>-0.5139</b>	<b>0.1287</b>
<b>Protein-bound Lys</b>	<b>HSDH activity without effectors</b>	<b>-0.4427</b>	<b>0.2002</b>
Protein-bound Lys	<i>LKR-SDHI</i>	0.2015	0.5767
Protein-bound Lys	Lys-sensitive AK activity	-0.0031	0.9932
Protein-bound Lys	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.2158	0.5493
Protein-bound Lys	Protein-bound Ala	0.1426	0.6943
<b>Protein-bound Lys</b>	<b>Protein-bound Arg</b>	<b>0.7513</b>	<b>0.0122</b>
Protein-bound Lys	Protein-bound Gly	-0.0129	0.9718
<b>Protein-bound Lys</b>	<b>Protein-bound His</b>	<b>0.6637</b>	<b>0.0364</b>
<b>Protein-bound Lys</b>	<b>Protein-bound Ile</b>	<b>0.6489</b>	<b>0.0424</b>
Protein-bound Lys	Protein-bound Leu	0.2593	0.4694
Protein-bound Lys	<i>SAMS1</i>	-0.0992	0.7852
Protein-bound Lys	<i>SAMS2</i>	-0.2504	0.4853
<b>Protein-bound Lys</b>	<b><i>SAMS3</i></b>	<b>-0.4992</b>	<b>0.1418</b>
Protein-bound Lys	<i>SAMS4</i>	-0.3038	0.3935
<b>Protein-bound Lys</b>	<b><i>SAMSs</i></b>	<b>-0.4541</b>	<b>0.1874</b>
Protein-bound Lys	<i>TD1</i>	-0.2986	0.4020
Protein-bound Lys	<i>TD1/BCAT1</i>	-0.3120	0.3801
<b>Protein-bound Lys</b>	<b><i>THA1</i></b>	<b>0.4294</b>	<b>0.2156</b>
Protein-bound Lys	<i>THA2</i>	-0.1317	0.7168
Protein-bound Lys	<i>THAs</i>	-0.0566	0.8767
Protein-bound Lys	<i>THAs+TD1</i>	-0.3045	0.3923
<b>Protein-bound Lys</b>	<b>Thr-sensitive AK activity</b>	<b>0.5312</b>	<b>0.1141</b>
Protein-bound Lys	Total free AAs	-0.3798	0.2791
Protein-bound Lys	<i>TS1</i>	-0.1392	0.7013
Protein-bound Lys	<i>TS1/(THAs+TD1)</i>	0.2676	0.4548
Protein-bound Lys	<i>TS1/TD1</i>	0.1299	0.7206
<b>Protein-bound Lys</b>	<b><i>TS1/THAs</i></b>	<b>-0.4640</b>	<b>0.1767</b>
Protein-bound Phe	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2064	0.5673
Protein-bound Phe	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.2708	0.4492
<b>Protein-bound Phe</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.4551</b>	<b>0.1863</b>
Protein-bound Phe	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.1083	0.7658
Protein-bound Phe	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2451	0.4949
Protein-bound Phe	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.0079	0.9826
Protein-bound Phe	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.2083	0.5635
<b>Protein-bound Phe</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.4525</b>	<b>0.1891</b>
Protein-bound Phe	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.0036	0.9922

Protein-bound Phe	AK activity with four effectors	-0.1980	0.5835
Protein-bound Phe	AK activity without effectors	-0.2780	0.4367
Protein-bound Phe	AK activity/HSDH activity with four effectors	0.1757	0.6273
Protein-bound Phe	AK activity/HSDH activity without effectors	0.1785	0.6216
Protein-bound Phe	<i>AK1</i>	0.1193	0.7427
Protein-bound Phe	<i>AK1+AK2</i>	-0.2661	0.4573
Protein-bound Phe	<i>AK1+AK3</i>	0.1084	0.7655
Protein-bound Phe	<i>AK2</i>	-0.2814	0.4309
Protein-bound Phe	<i>AK2+AK3</i>	-0.2724	0.4464
Protein-bound Phe	<i>AK3</i>	0.0066	0.9856
Protein-bound Phe	<i>AK-HSDH1</i>	-0.1490	0.6811
Protein-bound Phe	<i>AK-HSDH2</i>	-0.0980	0.7876
Protein-bound Phe	<i>AK-HSDHs</i>	-0.1509	0.6774
Protein-bound Phe	<i>AK-HSDHs+CGS1</i>	-0.2579	0.4718
Protein-bound Phe	<i>AK-HSDHs+TS1</i>	-0.3971	0.2558
<b>Protein-bound Phe</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>-0.4134</b>	<b>0.2351</b>
<b>Protein-bound Phe</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>-0.4071</b>	<b>0.2430</b>
Protein-bound Phe	<i>AKs</i>	-0.2602	0.4678
Protein-bound Phe	<i>AKs/AK-HSDHs</i>	-0.1083	0.7658
Protein-bound Phe	<i>AKs+AK-HSDHs</i>	-0.3111	0.3815
Protein-bound Phe	<i>AKs+AK-HSDHs+CGS1</i>	-0.3674	0.2964
Protein-bound Phe	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.3261	0.3578
<b>Protein-bound Phe</b>	<b><i>AKs+AK-HSDHs+TS1</i></b>	<b>-0.4578</b>	<b>0.1834</b>
<b>Protein-bound Phe</b>	<b><i>AKs+AK-HSDHs+TS1+TD1</i></b>	<b>-0.4718</b>	<b>0.1686</b>
<b>Protein-bound Phe</b>	<b><i>AKs+AK-HSDHs+TS1+THAs</i></b>	<b>-0.4607</b>	<b>0.1802</b>
Protein-bound Phe	<i>AKs+DHDPSs</i>	-0.2778	0.4371
<b>Protein-bound Phe</b>	<b><i>BCAT1</i></b>	<b>0.4783</b>	<b>0.1621</b>
<b>Protein-bound Phe</b>	<b>Biosynthetic genes analyzed</b>	<b>-0.4810</b>	<b>0.1593</b>
Protein-bound Phe	Catabolic genes analyzed	-0.1386	0.7025
Protein-bound Phe	<i>CGS1</i>	-0.3221	0.3640
Protein-bound Phe	<i>CGS1/SAMSs</i>	-0.1325	0.7151
Protein-bound Phe	<i>CGS1/TS1</i>	0.2474	0.4908
<b>Protein-bound Phe</b>	<b><i>DHDPS1</i></b>	<b>-0.6507</b>	<b>0.0416</b>
Protein-bound Phe	<i>DHDPS2</i>	-0.1305	0.7193
<b>Protein-bound Phe</b>	<b><i>DHDPSs</i></b>	<b>-0.4732</b>	<b>0.1672</b>
Protein-bound Phe	<i>DHDPSs/AK-HSDHs</i>	-0.0101	0.9779
Protein-bound Phe	<i>DHDPSs/LKR-SDH1</i>	-0.0784	0.8296
Protein-bound Phe	Free (Lys+Met+Thr+Ile)/Asp	-0.2817	0.4304
Protein-bound Phe	Free Ala	-0.3532	0.3168
<b>Protein-bound Phe</b>	<b>Free Arg</b>	<b>-0.5967</b>	<b>0.0686</b>
<b>Protein-bound Phe</b>	<b>Free Asn</b>	<b>-0.4553</b>	<b>0.1860</b>
Protein-bound Phe	Free Asn+Asp	-0.2108	0.5588
<b>Protein-bound Phe</b>	<b>Free Asn+Asp+Lys+Met+Thr+Ile</b>	<b>-0.5424</b>	<b>0.1052</b>
<b>Protein-bound Phe</b>	<b>Free Asn+Asp+Lys+Thr+Ile</b>	<b>-0.5395</b>	<b>0.1075</b>
Protein-bound Phe	Free Asp	-0.1728	0.6330
<b>Protein-bound Phe</b>	<b>Free Asp+Lys+Met+Thr+Ile</b>	<b>-0.5286</b>	<b>0.1162</b>
<b>Protein-bound Phe</b>	<b>Free Cys</b>	<b>-0.5243</b>	<b>0.1198</b>
Protein-bound Phe	Free Gln	-0.3922	0.2623
Protein-bound Phe	Free Glu	-0.1544	0.6701
Protein-bound Phe	Free Gly	-0.1883	0.6023
Protein-bound Phe	Free Gly/Thr	0.3721	0.2896
Protein-bound Phe	Free Gly+Ile	-0.2388	0.5065
<b>Protein-bound Phe</b>	<b>Free His</b>	<b>-0.5011</b>	<b>0.1401</b>
<b>Protein-bound Phe</b>	<b>Free Ile</b>	<b>-0.8275</b>	<b>0.0031</b>
Protein-bound Phe	Free Ile/Thr	0.3777	0.2819
<b>Protein-bound Phe</b>	<b>Free Leu</b>	<b>-0.5053</b>	<b>0.1363</b>
<b>Protein-bound Phe</b>	<b>Free Lys</b>	<b>-0.5558</b>	<b>0.0952</b>
Protein-bound Phe	Free Lys/(Met+Thr+Ile)	0.3176	0.3713

<b>Protein-bound Phe</b>	<b>Free Lys/Asp</b>	<b>-0.4521</b>	<b>0.1896</b>
Protein-bound Phe	Free Lys/Thr	0.3430	0.3319
<b>Protein-bound Phe</b>	<b>Free Lys+Met+Thr+Ile</b>	<b>-0.4827</b>	<b>0.1577</b>
Protein-bound Phe	Free Met	-0.1464	0.6865
Protein-bound Phe	Free Met/(Thr+Ile)	0.3242	0.3608
<b>Protein-bound Phe</b>	<b>Free Met/Thr</b>	<b>0.4130</b>	<b>0.2355</b>
<b>Protein-bound Phe</b>	<b>Free Met+Thr+Ile</b>	<b>-0.4616</b>	<b>0.1793</b>
<b>Protein-bound Phe</b>	<b>Free Phe</b>	<b>-0.4566</b>	<b>0.1847</b>
Protein-bound Phe	Free Pro	-0.2641	0.4609
Protein-bound Phe	Free Ser	-0.0646	0.8592
<b>Protein-bound Phe</b>	<b>Free Thr</b>	<b>-0.4473</b>	<b>0.1950</b>
Protein-bound Phe	Free Thr/(Gly+Ile)	-0.3946	0.2591
Protein-bound Phe	Free Thr/Asp	-0.2717	0.4476
Protein-bound Phe	Free Trp	-0.3838	0.2736
<b>Protein-bound Phe</b>	<b>Free Tyr</b>	<b>-0.5199</b>	<b>0.1235</b>
Protein-bound Phe	Free Val	-0.2878	0.4200
<b>Protein-bound Phe</b>	<b>HSDH activity with four effectors</b>	<b>-0.5618</b>	<b>0.0910</b>
<b>Protein-bound Phe</b>	<b>HSDH activity without effectors</b>	<b>-0.4950</b>	<b>0.1458</b>
Protein-bound Phe	<i>LKR-SDHI</i>	-0.2056	0.5687
Protein-bound Phe	Lys-sensitive AK activity	-0.0551	0.8799
Protein-bound Phe	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.3789	0.2803
Protein-bound Phe	Protein-bound Ala	0.1265	0.7277
<b>Protein-bound Phe</b>	<b>Protein-bound Arg</b>	<b>0.6612</b>	<b>0.0374</b>
Protein-bound Phe	Protein-bound Gly	-0.0330	0.9279
<b>Protein-bound Phe</b>	<b>Protein-bound His</b>	<b>0.7327</b>	<b>0.0159</b>
<b>Protein-bound Phe</b>	<b>Protein-bound Ile</b>	<b>0.5744</b>	<b>0.0824</b>
Protein-bound Phe	Protein-bound Leu	0.1885	0.6019
<b>Protein-bound Phe</b>	<b>Protein-bound Lys</b>	<b>0.7187</b>	<b>0.0192</b>
Protein-bound Phe	<i>SAMS1</i>	-0.2053	0.5694
<b>Protein-bound Phe</b>	<b><i>SAMS2</i></b>	<b>-0.6165</b>	<b>0.0576</b>
Protein-bound Phe	<i>SAMS3</i>	-0.0293	0.9361
Protein-bound Phe	<i>SAMS4</i>	-0.1551	0.6687
Protein-bound Phe	<i>SAMSs</i>	-0.1359	0.7081
<b>Protein-bound Phe</b>	<b><i>TD1</i></b>	<b>-0.4368</b>	<b>0.2069</b>
<b>Protein-bound Phe</b>	<b><i>TD1/BCAT1</i></b>	<b>-0.4705</b>	<b>0.1699</b>
Protein-bound Phe	<i>THA1</i>	0.0668	0.8544
<b>Protein-bound Phe</b>	<b><i>THA2</i></b>	<b>-0.5626</b>	<b>0.0904</b>
<b>Protein-bound Phe</b>	<b><i>THAs</i></b>	<b>-0.5199</b>	<b>0.1235</b>
<b>Protein-bound Phe</b>	<b><i>THAs+TD1</i></b>	<b>-0.5337</b>	<b>0.1121</b>
<b>Protein-bound Phe</b>	<b>Thr-sensitive AK activity</b>	<b>0.4727</b>	<b>0.1677</b>
<b>Protein-bound Phe</b>	<b>Total free AAs</b>	<b>-0.4019</b>	<b>0.2496</b>
<b>Protein-bound Phe</b>	<b><i>TS1</i></b>	<b>-0.4531</b>	<b>0.1884</b>
Protein-bound Phe	<i>TS1/(THAs+TD1)</i>	0.3570	0.3112
Protein-bound Phe	<i>TS1/TD1</i>	0.3183	0.3702
Protein-bound Phe	<i>TS1/THAs</i>	-0.2154	0.5502
Protein-bound Pro	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.3742	0.2868
Protein-bound Pro	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.3232	0.3623
<b>Protein-bound Pro</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.4750</b>	<b>0.1653</b>
Protein-bound Pro	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2645	0.4602
Protein-bound Pro	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2876	0.4204
Protein-bound Pro	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.1961	0.5871
Protein-bound Pro	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.0849	0.8155
<b>Protein-bound Pro</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.4950</b>	<b>0.1458</b>
Protein-bound Pro	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.2673	0.4553
Protein-bound Pro	AK activity with four effectors	-0.1269	0.7269
Protein-bound Pro	AK activity without effectors	0.1121	0.7578
Protein-bound Pro	AK activity/HSDH activity with four effectors	-0.0568	0.8761
Protein-bound Pro	AK activity/HSDH activity without effectors	-0.2189	0.5435

Protein-bound Pro	<i>AK1</i>	-0.0087	0.9811
Protein-bound Pro	<i>AK1+AK2</i>	-0.2866	0.4220
Protein-bound Pro	<i>AK1+AK3</i>	-0.0110	0.9758
Protein-bound Pro	<i>AK2</i>	-0.2760	0.4401
Protein-bound Pro	<i>AK2+AK3</i>	-0.2689	0.4526
Protein-bound Pro	<i>AK3</i>	-0.0104	0.9773
<b>Protein-bound Pro</b>	<b><i>AK-HSDH1</i></b>	<b>0.4901</b>	<b>0.1505</b>
Protein-bound Pro	<i>AK-HSDH2</i>	-0.3326	0.3477
Protein-bound Pro	<i>AK-HSDHs</i>	0.0568	0.8761
Protein-bound Pro	<i>AK-HSDHs+CGSI</i>	-0.1347	0.7106
Protein-bound Pro	<i>AK-HSDHs+TS1</i>	0.2286	0.5253
Protein-bound Pro	<i>AK-HSDHs+TS1+TD1</i>	0.2058	0.5683
Protein-bound Pro	<i>AK-HSDHs+TS1+THAs</i>	0.2252	0.5315
Protein-bound Pro	<i>AKs</i>	-0.2838	0.4268
Protein-bound Pro	<i>AKs/AK-HSDHs</i>	-0.2645	0.4602
Protein-bound Pro	<i>AKs+AK-HSDHs</i>	-0.2803	0.4327
Protein-bound Pro	<i>AKs+AK-HSDHs+CGSI</i>	-0.3353	0.3435
Protein-bound Pro	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.2771	0.4383
Protein-bound Pro	<i>AKs+AK-HSDHs+TS1</i>	-0.0899	0.8050
Protein-bound Pro	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.0919	0.8007
Protein-bound Pro	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.0920	0.8005
Protein-bound Pro	<i>AKs+DHDPSs</i>	-0.2829	0.4284
<b>Protein-bound Pro</b>	<b><i>BCAT1</i></b>	<b>0.5531</b>	<b>0.0973</b>
Protein-bound Pro	Biosynthetic genes analyzed	-0.1341	0.7120
Protein-bound Pro	Catabolic genes analyzed	0.0353	0.9229
Protein-bound Pro	<i>CGSI</i>	-0.3132	0.3782
Protein-bound Pro	<i>CGSI/SAMSs</i>	-0.3542	0.3152
<b>Protein-bound Pro</b>	<b><i>CGSI/TS1</i></b>	<b>-0.6990</b>	<b>0.0245</b>
Protein-bound Pro	<i>DHDPS1</i>	0.1111	0.7600
Protein-bound Pro	<i>DHDPS2</i>	-0.0999	0.7837
Protein-bound Pro	<i>DHDPSs</i>	0.0041	0.9910
Protein-bound Pro	<i>DHDPSs/AK-HSDHs</i>	-0.0901	0.8044
Protein-bound Pro	<i>DHDPSs/LKR-SDH1</i>	-0.0173	0.9623
Protein-bound Pro	Free (Lys+Met+Thr+Ile)/Asp	0.3858	0.2708
Protein-bound Pro	Free Ala	-0.1454	0.6885
<b>Protein-bound Pro</b>	<b>Free Arg</b>	<b>-0.5545</b>	<b>0.0962</b>
<b>Protein-bound Pro</b>	<b>Free Asn</b>	<b>-0.4327</b>	<b>0.2117</b>
Protein-bound Pro	Free Asn+Asp	-0.3728	0.2888
Protein-bound Pro	Free Asn+Asp+Lys+Met+Thr+Ile	0.0202	0.9558
Protein-bound Pro	Free Asn+Asp+Lys+Thr+Ile	0.0258	0.9437
Protein-bound Pro	Free Asp	-0.3606	0.3061
Protein-bound Pro	Free Asp+Lys+Met+Thr+Ile	0.0533	0.8838
Protein-bound Pro	Free Cys	-0.0102	0.9778
<b>Protein-bound Pro</b>	<b>Free Gln</b>	<b>-0.4353</b>	<b>0.2086</b>
<b>Protein-bound Pro</b>	<b>Free Glu</b>	<b>-0.4458</b>	<b>0.1966</b>
Protein-bound Pro	Free Gly	-0.1109	0.7604
Protein-bound Pro	Free Gly/Thr	0.1113	0.7595
Protein-bound Pro	Free Gly+Ile	-0.1101	0.7621
<b>Protein-bound Pro</b>	<b>Free His</b>	<b>-0.4606</b>	<b>0.1804</b>
Protein-bound Pro	Free Ile	-0.0048	0.9895
Protein-bound Pro	Free Ile/Thr	0.1219	0.7372
Protein-bound Pro	Free Leu	-0.3713	0.2907
<b>Protein-bound Pro</b>	<b>Free Lys</b>	<b>-0.5485</b>	<b>0.1007</b>
Protein-bound Pro	Free Lys/(Met+Thr+Ile)	0.0042	0.9908
Protein-bound Pro	Free Lys/Asp	-0.0636	0.8615
Protein-bound Pro	Free Lys/Thr	0.0554	0.8792
Protein-bound Pro	Free Lys+Met+Thr+Ile	0.2081	0.5639



<b>Protein-bound Pro</b>	<b>Free Met</b>	<b>-0.4927</b>	<b>0.1480</b>
Protein-bound Pro	Free Met/(Thr+Ile)	0.0243	0.9469
Protein-bound Pro	Free Met/Thr	0.0964	0.7911
Protein-bound Pro	Free Met+Thr+Ile	0.2280	0.5264
Protein-bound Pro	Free Phe	-0.2800	0.4332
<b>Protein-bound Pro</b>	<b>Free Pro</b>	<b>-0.5332</b>	<b>0.1125</b>
Protein-bound Pro	Free Ser	-0.0821	0.8215
Protein-bound Pro	Free Thr	0.2361	0.5114
Protein-bound Pro	Free Thr/(Gly+Ile)	0.2230	0.5357
Protein-bound Pro	Free Thr/Asp	0.3912	0.2636
Protein-bound Pro	Free Trp	-0.1938	0.5917
Protein-bound Pro	Free Tyr	-0.3765	0.2835
Protein-bound Pro	Free Val	-0.0843	0.8169
Protein-bound Pro	HSDH activity with four effectors	-0.2305	0.5216
Protein-bound Pro	HSDH activity without effectors	0.1292	0.7220
Protein-bound Pro	<i>LKR-SDHI</i>	0.1896	0.5999
Protein-bound Pro	Lys-sensitive AK activity	0.1547	0.6696
Protein-bound Pro	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.3401	0.3363
<b>Protein-bound Pro</b>	<b>Protein-bound Ala</b>	<b>0.9530</b>	<b>&lt;.0001</b>
<b>Protein-bound Pro</b>	<b>Protein-bound Arg</b>	<b>0.4036</b>	<b>0.2474</b>
<b>Protein-bound Pro</b>	<b>Protein-bound Gly</b>	<b>0.9085</b>	<b>0.0003</b>
Protein-bound Pro	Protein-bound His	0.1905	0.5981
<b>Protein-bound Pro</b>	<b>Protein-bound Ile</b>	<b>0.4293</b>	<b>0.2157</b>
Protein-bound Pro	Protein-bound Leu	0.3520	0.3185
Protein-bound Pro	Protein-bound Lys	0.2630	0.4629
Protein-bound Pro	Protein-bound Phe	0.2125	0.5555
Protein-bound Pro	<i>SAMS1</i>	-0.2343	0.5148
Protein-bound Pro	<i>SAMS2</i>	0.0350	0.9236
Protein-bound Pro	<i>SAMS3</i>	0.1337	0.7127
Protein-bound Pro	<i>SAMS4</i>	0.0883	0.8082
Protein-bound Pro	<i>SAMSs</i>	0.0315	0.9311
Protein-bound Pro	<i>TD1</i>	-0.0769	0.8328
<b>Protein-bound Pro</b>	<b><i>TD1/BCAT1</i></b>	<b>-0.4839</b>	<b>0.1564</b>
<b>Protein-bound Pro</b>	<b><i>THA1</i></b>	<b>0.4035</b>	<b>0.2476</b>
Protein-bound Pro	<i>THA2</i>	-0.2411	0.5021
Protein-bound Pro	<i>THAs</i>	-0.2185	0.5441
Protein-bound Pro	<i>THAs+TD1</i>	-0.1069	0.7688
<b>Protein-bound Pro</b>	<b>Thr-sensitive AK activity</b>	<b>0.5437</b>	<b>0.1042</b>
Protein-bound Pro	Total free AAs	-0.3589	0.3085
Protein-bound Pro	<i>TS1</i>	0.2750	0.4419
<b>Protein-bound Pro</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>0.4325</b>	<b>0.2119</b>
Protein-bound Pro	<i>TS1/TD1</i>	0.2222	0.5373
Protein-bound Pro	<i>TS1/THAs</i>	0.2084	0.5634
Protein-bound Ser	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2217	0.5381
<b>Protein-bound Ser</b>	<b><i>(AK-HSDHs+TS1)/(THAs+TD1)</i></b>	<b>0.4469</b>	<b>0.1954</b>
<b>Protein-bound Ser</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.4342</b>	<b>0.2099</b>
Protein-bound Ser	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.3120	0.3802
Protein-bound Ser	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2633	0.4623
Protein-bound Ser	<i>(AKs+AK-HSDHs+DHDPs)/LKR-SDHI</i>	0.1765	0.6258
Protein-bound Ser	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.2427	0.4992
<b>Protein-bound Ser</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.4519</b>	<b>0.1898</b>
Protein-bound Ser	<i>(AKs+DHDPs)/LKR-SDHI</i>	0.1041	0.7747
Protein-bound Ser	AK activity with four effectors	0.2627	0.4633
<b>Protein-bound Ser</b>	<b>AK activity without effectors</b>	<b>0.4741</b>	<b>0.1663</b>
Protein-bound Ser	AK activity/HSDH activity with four effectors	0.1907	0.5976
Protein-bound Ser	AK activity/HSDH activity without effectors	0.0273	0.9404
Protein-bound Ser	<i>AKI</i>	-0.1967	0.5859

Protein-bound Ser	<i>AK1+AK2</i>	-0.1730	0.6327
Protein-bound Ser	<i>AK1+AK3</i>	-0.1116	0.7589
Protein-bound Ser	<i>AK2</i>	-0.1270	0.7266
Protein-bound Ser	<i>AK2+AK3</i>	-0.1087	0.7649
Protein-bound Ser	<i>AK3</i>	0.0798	0.8265
<b>Protein-bound Ser</b>	<b><i>AK-HSDH1</i></b>	<b>0.6230</b>	<b>0.0544</b>
Protein-bound Ser	<i>AK-HSDH2</i>	-0.1194	0.7425
Protein-bound Ser	<i>AK-HSDHs</i>	0.2704	0.4499
Protein-bound Ser	<i>AK-HSDHs+CGS1</i>	0.1823	0.6143
<b>Protein-bound Ser</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.4337</b>	<b>0.2104</b>
<b>Protein-bound Ser</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>0.4014</b>	<b>0.2502</b>
<b>Protein-bound Ser</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>0.4327</b>	<b>0.2116</b>
Protein-bound Ser	<i>AKs</i>	-0.1560	0.6670
Protein-bound Ser	<i>AKs/AK-HSDHs</i>	-0.3120	0.3802
Protein-bound Ser	<i>AKs+AK-HSDHs</i>	-0.0915	0.8015
Protein-bound Ser	<i>AKs+AK-HSDHs+CGS1</i>	-0.0733	0.8406
Protein-bound Ser	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0911	0.8024
Protein-bound Ser	<i>AKs+AK-HSDHs+TS1</i>	0.1401	0.6994
Protein-bound Ser	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.1346	0.7108
Protein-bound Ser	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.1392	0.7013
Protein-bound Ser	<i>AKs+DHDPSs</i>	-0.1564	0.6662
<b>Protein-bound Ser</b>	<b><i>BCAT1</i></b>	<b>0.6372</b>	<b>0.0475</b>
Protein-bound Ser	Biosynthetic genes analyzed	0.1356	0.7089
Protein-bound Ser	Catabolic genes analyzed	0.2091	0.5622
Protein-bound Ser	<i>CGS1</i>	0.0528	0.8848
Protein-bound Ser	<i>CGS1/SAMSs</i>	-0.3362	0.3422
<b>Protein-bound Ser</b>	<b><i>CGS1/TS1</i></b>	<b>-0.5661</b>	<b>0.0880</b>
Protein-bound Ser	<i>DHDPS1</i>	-0.1498	0.6795
Protein-bound Ser	<i>DHDPS2</i>	0.0948	0.7944
Protein-bound Ser	<i>DHDPSs</i>	-0.0239	0.9477
Protein-bound Ser	<i>DHDPSs/AK-HSDHs</i>	-0.3214	0.3652
Protein-bound Ser	<i>DHDPSs/LKR-SDH1</i>	0.2198	0.5418
Protein-bound Ser	Free (Lys+Met+Thr+Ile)/Asp	0.3921	0.2624
Protein-bound Ser	Free Ala	-0.1521	0.6748
<b>Protein-bound Ser</b>	<b>Free Arg</b>	<b>-0.4323</b>	<b>0.2122</b>
<b>Protein-bound Ser</b>	<b>Free Asn</b>	<b>-0.4344</b>	<b>0.2096</b>
<b>Protein-bound Ser</b>	<b>Free Asn+Asp</b>	<b>-0.5168</b>	<b>0.1262</b>
Protein-bound Ser	Free Asn+Asp+Lys+Met+Thr+Ile	-0.1154	0.7508
Protein-bound Ser	Free Asn+Asp+Lys+Thr+Ile	-0.1112	0.7597
<b>Protein-bound Ser</b>	<b>Free Asp</b>	<b>-0.5246</b>	<b>0.1195</b>
Protein-bound Ser	Free Asp+Lys+Met+Thr+Ile	-0.0874	0.8103
Protein-bound Ser	Free Cys	-0.1488	0.6817
<b>Protein-bound Ser</b>	<b>Free Gln</b>	<b>-0.4497</b>	<b>0.1922</b>
<b>Protein-bound Ser</b>	<b>Free Glu</b>	<b>-0.5445</b>	<b>0.1036</b>
Protein-bound Ser	Free Gly	-0.2608	0.4668
Protein-bound Ser	Free Gly/Thr	-0.0613	0.8665
Protein-bound Ser	Free Gly+Ile	-0.2554	0.4763
Protein-bound Ser	Free His	-0.3203	0.3670
Protein-bound Ser	Free Ile	0.0421	0.9080
Protein-bound Ser	Free Ile/Thr	0.0625	0.8638
Protein-bound Ser	Free Leu	-0.3325	0.3479
<b>Protein-bound Ser</b>	<b>Free Lys</b>	<b>-0.4942</b>	<b>0.1465</b>
Protein-bound Ser	Free Lys/(Met+Thr+Ile)	-0.0520	0.8865
Protein-bound Ser	Free Lys/Asp	0.1828	0.6131
Protein-bound Ser	Free Lys/Thr	-0.0144	0.9685
Protein-bound Ser	Free Lys+Met+Thr+Ile	0.1293	0.7218
<b>Protein-bound Ser</b>	<b>Free Met</b>	<b>-0.5504</b>	<b>0.0992</b>

Protein-bound Ser	Free Met/(Thr+Ile)	-0.1142	0.7534
Protein-bound Ser	Free Met/Thr	-0.0444	0.9032
Protein-bound Ser	Free Met+Thr+Ile	0.1473	0.6847
Protein-bound Ser	Free Phe	-0.1920	0.5952
<b>Protein-bound Ser</b>	<b>Free Pro</b>	<b>-0.5883</b>	<b>0.0736</b>
Protein-bound Ser	Free Ser	-0.2142	0.5523
Protein-bound Ser	Free Thr	0.1554	0.6682
Protein-bound Ser	Free Thr/(Gly+Ile)	0.1955	0.5884
Protein-bound Ser	Free Thr/Asp	0.3857	0.2710
Protein-bound Ser	Free Trp	-0.1324	0.7154
Protein-bound Ser	Free Tyr	-0.2303	0.5222
Protein-bound Ser	Free Val	0.1111	0.7600
Protein-bound Ser	HSDH activity with four effectors	-0.0549	0.8802
Protein-bound Ser	HSDH activity without effectors	0.2128	0.5550
Protein-bound Ser	<i>LKR-SDHI</i>	-0.1184	0.7447
Protein-bound Ser	Lys-sensitive AK activity	0.3719	0.2899
Protein-bound Ser	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.2490	0.4879
<b>Protein-bound Ser</b>	<b>Protein-bound Ala</b>	<b>0.9365</b>	<b>&lt;.0001</b>
Protein-bound Ser	Protein-bound Arg	0.2580	0.4717
<b>Protein-bound Ser</b>	<b>Protein-bound Gly</b>	<b>0.8972</b>	<b>0.0004</b>
Protein-bound Ser	Protein-bound His	0.3499	0.3216
Protein-bound Ser	Protein-bound Ile	0.3375	0.3402
<b>Protein-bound Ser</b>	<b>Protein-bound Leu</b>	<b>0.5457</b>	<b>0.1027</b>
Protein-bound Ser	Protein-bound Lys	0.2522	0.4821
Protein-bound Ser	Protein-bound Phe	0.2150	0.5508
<b>Protein-bound Ser</b>	<b>Protein-bound Pro</b>	<b>0.8837</b>	<b>0.0007</b>
Protein-bound Ser	<i>SAMS1</i>	-0.2685	0.4533
Protein-bound Ser	<i>SAMS2</i>	-0.0185	0.9595
Protein-bound Ser	<i>SAMS3</i>	0.3366	0.3416
Protein-bound Ser	<i>SAMS4</i>	0.3099	0.3835
Protein-bound Ser	<i>SAMSs</i>	0.2047	0.5706
Protein-bound Ser	<i>TD1</i>	-0.0212	0.9536
<b>Protein-bound Ser</b>	<b><i>TD1/BCAT1</i></b>	<b>-0.4473</b>	<b>0.1949</b>
Protein-bound Ser	<i>THA1</i>	0.0490	0.8931
Protein-bound Ser	<i>THA2</i>	-0.0331	0.9277
Protein-bound Ser	<i>THAs</i>	-0.0486	0.8940
Protein-bound Ser	<i>THAs+TD1</i>	-0.0217	0.9525
<b>Protein-bound Ser</b>	<b>Thr-sensitive AK activity</b>	<b>0.6517</b>	<b>0.0412</b>
<b>Protein-bound Ser</b>	<b>Total free AAs</b>	<b>-0.4480</b>	<b>0.1942</b>
<b>Protein-bound Ser</b>	<b><i>TS1</i></b>	<b>0.4485</b>	<b>0.1936</b>
<b>Protein-bound Ser</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>0.5028</b>	<b>0.1385</b>
Protein-bound Ser	<i>TS1/TD1</i>	0.3310	0.3502
Protein-bound Ser	<i>TS1/THAs</i>	0.1595	0.6599
Protein-bound Thr	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2959	0.4065
Protein-bound Thr	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.2926	0.4120
Protein-bound Thr	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.3794	0.2796
<b>Protein-bound Thr</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>-0.4611</b>	<b>0.1798</b>
<b>Protein-bound Thr</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>-0.4237</b>	<b>0.2224</b>
Protein-bound Thr	<i>(AKs+AK-HSDHs+DHDPs)/LKR-SDHI</i>	-0.0776	0.8313
Protein-bound Thr	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.0244	0.9467
<b>Protein-bound Thr</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.4052</b>	<b>0.2453</b>
Protein-bound Thr	<i>(AKs+DHDPs)/LKR-SDHI</i>	-0.1993	0.5809
Protein-bound Thr	AK activity with four effectors	-0.1547	0.6696
Protein-bound Thr	AK activity without effectors	0.0663	0.8557
Protein-bound Thr	AK activity/HSDH activity with four effectors	-0.1985	0.5826
Protein-bound Thr	AK activity/HSDH activity without effectors	-0.2969	0.4048
Protein-bound Thr	<i>AK1</i>	-0.2203	0.5408

<b>Protein-bound Thr</b>	<b>AK1+AK2</b>	<b>-0.4275</b>	<b>0.2178</b>
Protein-bound Thr	AK1+AK3	-0.1005	0.7823
Protein-bound Thr	AK2	-0.3676	0.2961
Protein-bound Thr	AK2+AK3	-0.3349	0.3442
Protein-bound Thr	AK3	0.1257	0.7293
<b>Protein-bound Thr</b>	<b>AK-HSDH1</b>	<b>0.6088</b>	<b>0.0618</b>
Protein-bound Thr	AK-HSDH2	-0.0747	0.8374
Protein-bound Thr	AK-HSDHs	0.2917	0.4135
Protein-bound Thr	AK-HSDHs+CGS1	0.1370	0.7059
<b>Protein-bound Thr</b>	<b>AK-HSDHs+TS1</b>	<b>0.4234</b>	<b>0.2228</b>
<b>Protein-bound Thr</b>	<b>AK-HSDHs+TS1+TD1</b>	<b>0.4056</b>	<b>0.2449</b>
<b>Protein-bound Thr</b>	<b>AK-HSDHs+TS1+THAs</b>	<b>0.4180</b>	<b>0.2293</b>
Protein-bound Thr	AKs	-0.3981	0.2546
<b>Protein-bound Thr</b>	<b>AKs/AK-HSDHs</b>	<b>-0.4611</b>	<b>0.1798</b>
Protein-bound Thr	AKs+AK-HSDHs	-0.3372	0.3407
Protein-bound Thr	AKs+AK-HSDHs+CGS1	-0.3301	0.3516
Protein-bound Thr	AKs+AK-HSDHs+DHDPSs	-0.3286	0.3538
Protein-bound Thr	AKs+AK-HSDHs+TS1	-0.0632	0.8623
Protein-bound Thr	AKs+AK-HSDHs+TS1+TD1	-0.0535	0.8834
Protein-bound Thr	AKs+AK-HSDHs+TS1+THAs	-0.0669	0.8544
Protein-bound Thr	AKs+DHDPSs	-0.3914	0.2633
<b>Protein-bound Thr</b>	<b>BCAT1</b>	<b>0.4037</b>	<b>0.2473</b>
Protein-bound Thr	Biosynthetic genes analyzed	-0.0621	0.8647
Protein-bound Thr	Catabolic genes analyzed	0.2295	0.5235
Protein-bound Thr	CGS1	-0.0548	0.8805
Protein-bound Thr	CGS1/SAMSs	-0.3968	0.2563
<b>Protein-bound Thr</b>	<b>CGS1/TS1</b>	<b>-0.6397</b>	<b>0.0464</b>
Protein-bound Thr	DHDPS1	0.0469	0.8976
Protein-bound Thr	DHDPS2	0.1405	0.6986
Protein-bound Thr	DHDPSs	0.1250	0.7307
Protein-bound Thr	DHDPSs/AK-HSDHs	-0.3076	0.3873
Protein-bound Thr	DHDPSs/LKR-SDH1	0.2276	0.5271
Protein-bound Thr	Free (Lys+Met+Thr+Ile)/Asp	0.0917	0.8010
Protein-bound Thr	Free Ala	0.1268	0.7271
<b>Protein-bound Thr</b>	<b>Free Arg</b>	<b>-0.4140</b>	<b>0.2342</b>
Protein-bound Thr	Free Asn	-0.2861	0.4229
Protein-bound Thr	Free Asn+Asp	-0.2439	0.4971
Protein-bound Thr	Free Asn+Asp+Lys+Met+Thr+Ile	-0.1709	0.6369
Protein-bound Thr	Free Asn+Asp+Lys+Thr+Ile	-0.1685	0.6418
Protein-bound Thr	Free Asp	-0.2382	0.5075
Protein-bound Thr	Free Asp+Lys+Met+Thr+Ile	-0.1540	0.6709
Protein-bound Thr	Free Cys	-0.2643	0.4606
Protein-bound Thr	Free Gln	-0.2930	0.4113
<b>Protein-bound Thr</b>	<b>Free Glu</b>	<b>-0.4148</b>	<b>0.2332</b>
Protein-bound Thr	Free Gly	-0.0169	0.9630
Protein-bound Thr	Free Gly/Thr	0.3072	0.3878
Protein-bound Thr	Free Gly+Ile	-0.0144	0.9685
Protein-bound Thr	Free His	-0.2691	0.4522
Protein-bound Thr	Free Ile	0.0365	0.9203
Protein-bound Thr	Free Ile/Thr	0.3815	0.2767
Protein-bound Thr	Free Leu	-0.1461	0.6872
Protein-bound Thr	Free Lys	-0.3630	0.3026
Protein-bound Thr	Free Lys/(Met+Thr+Ile)	0.2854	0.4241
Protein-bound Thr	Free Lys/Asp	-0.0666	0.8550
Protein-bound Thr	Free Lys/Thr	0.3245	0.3603
Protein-bound Thr	Free Lys+Met+Thr+Ile	-0.0646	0.8592
Protein-bound Thr	Free Met	-0.3819	0.2762

Protein-bound Thr	Free Met/(Thr+Ile)	0.2561	0.4750
Protein-bound Thr	Free Met/Thr	0.3253	0.3591
Protein-bound Thr	Free Met+Thr+Ile	-0.0512	0.8882
Protein-bound Thr	Free Phe	0.0146	0.9681
Protein-bound Thr	Free Pro	-0.3969	0.2561
Protein-bound Thr	Free Ser	0.1057	0.7714
Protein-bound Thr	Free Thr	-0.0467	0.8981
Protein-bound Thr	Free Thr/(Gly+Ile)	-0.0729	0.8415
Protein-bound Thr	Free Thr/Asp	0.0926	0.7992
Protein-bound Thr	Free Trp	0.0693	0.8492
Protein-bound Thr	Free Tyr	-0.0884	0.8080
Protein-bound Thr	Free Val	0.2242	0.5335
Protein-bound Thr	HSDH activity with four effectors	-0.0436	0.9048
Protein-bound Thr	HSDH activity without effectors	0.2072	0.5658
Protein-bound Thr	<i>LKR-SDHI</i>	-0.0006	0.9987
Protein-bound Thr	Lys-sensitive AK activity	-0.0303	0.9338
<b>Protein-bound Thr</b>	<b>Lys-sensitive AK activity/Thr-sensitive AK activity</b>	<b>-0.5433</b>	<b>0.1045</b>
<b>Protein-bound Thr</b>	<b>Protein-bound Ala</b>	<b>0.9460</b>	<b>&lt;.0001</b>
Protein-bound Thr	Protein-bound Arg	0.2970	0.4047
<b>Protein-bound Thr</b>	<b>Protein-bound Gly</b>	<b>0.8542</b>	<b>0.0017</b>
Protein-bound Thr	Protein-bound His	0.1779	0.6229
Protein-bound Thr	Protein-bound Ile	0.2769	0.4387
<b>Protein-bound Thr</b>	<b>Protein-bound Leu</b>	<b>0.5059</b>	<b>0.1357</b>
Protein-bound Thr	Protein-bound Lys	0.3384	0.3388
Protein-bound Thr	Protein-bound Phe	0.2189	0.5435
<b>Protein-bound Thr</b>	<b>Protein-bound Pro</b>	<b>0.9225</b>	<b>0.0001</b>
<b>Protein-bound Thr</b>	<b>Protein-bound Ser</b>	<b>0.8818</b>	<b>0.0007</b>
Protein-bound Thr	<i>SAMS1</i>	0.0072	0.9842
Protein-bound Thr	<i>SAMS2</i>	0.1263	0.7280
Protein-bound Thr	<i>SAMS3</i>	0.2208	0.5398
Protein-bound Thr	<i>SAMS4</i>	0.3361	0.3423
Protein-bound Thr	<i>SAMSs</i>	0.2260	0.5302
Protein-bound Thr	<i>TD1</i>	0.1279	0.7246
Protein-bound Thr	<i>TD1/BCAT1</i>	-0.3767	0.2833
Protein-bound Thr	<i>THA1</i>	0.3163	0.3732
Protein-bound Thr	<i>THA2</i>	-0.2801	0.4331
Protein-bound Thr	<i>THAs</i>	-0.2885	0.4189
Protein-bound Thr	<i>THAs+TD1</i>	0.0778	0.8308
<b>Protein-bound Thr</b>	<b>Thr-sensitive AK activity</b>	<b>0.7837</b>	<b>0.0073</b>
Protein-bound Thr	Total free AAs	-0.2914	0.4140
<b>Protein-bound Thr</b>	<b><i>TSI</i></b>	<b>0.4259</b>	<b>0.2197</b>
Protein-bound Thr	<i>TSI/(THAs+TD1)</i>	0.3456	0.3281
Protein-bound Thr	<i>TSI/TD1</i>	0.1497	0.6798
Protein-bound Thr	<i>TSI/THAs</i>	0.3573	0.3108
Protein-bound Tyr	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2909	0.4149
Protein-bound Tyr	<i>(AK-HSDHs+TSI)/(THAs+TD1)</i>	0.1315	0.7172
Protein-bound Tyr	<i>(AK-HSDHs+TSI+TD1)/BCAT1</i>	-0.3259	0.3581
Protein-bound Tyr	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2572	0.4732
Protein-bound Tyr	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2990	0.4013
Protein-bound Tyr	<i>(AKs+AK-HSDHs+DHDPs)/LKR-SDHI</i>	0.1953	0.5887
Protein-bound Tyr	<i>(AKs+AK-HSDHs+TSI)/(THAs+TD1)</i>	-0.0219	0.9521
Protein-bound Tyr	<i>(AKs+AK-HSDHs+TSI+TD1)/BCAT1</i>	-0.3357	0.3429
Protein-bound Tyr	<i>(AKs+DHDPs)/LKR-SDHI</i>	0.1532	0.6726
Protein-bound Tyr	AK activity with four effectors	0.2707	0.4493
Protein-bound Tyr	AK activity without effectors	0.3862	0.2703
Protein-bound Tyr	AK activity/HSDH activity with four effectors	0.3390	0.3380
Protein-bound Tyr	AK activity/HSDH activity without effectors	0.2410	0.5024

Protein-bound Tyr	<i>AK1</i>	-0.3731	0.2883
Protein-bound Tyr	<i>AK1+AK2</i>	-0.1327	0.7147
Protein-bound Tyr	<i>AK1+AK3</i>	-0.2136	0.5535
Protein-bound Tyr	<i>AK2</i>	-0.0509	0.8890
Protein-bound Tyr	<i>AK2+AK3</i>	-0.0223	0.9513
Protein-bound Tyr	<i>AK3</i>	0.1590	0.6609
Protein-bound Tyr	<i>AK-HSDH1</i>	0.3763	0.2838
Protein-bound Tyr	<i>AK-HSDH2</i>	0.0674	0.8532
Protein-bound Tyr	<i>AK-HSDHs</i>	0.2533	0.4801
Protein-bound Tyr	<i>AK-HSDHs+CGS1</i>	0.3003	0.3992
<b>Protein-bound Tyr</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.4682</b>	<b>0.1723</b>
<b>Protein-bound Tyr</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>0.4562</b>	<b>0.1851</b>
<b>Protein-bound Tyr</b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>0.4681</b>	<b>0.1725</b>
Protein-bound Tyr	<i>AKs</i>	-0.1022	0.7787
Protein-bound Tyr	<i>AKs/AK-HSDHs</i>	-0.2572	0.4732
Protein-bound Tyr	<i>AKs+AK-HSDHs</i>	-0.0403	0.9121
Protein-bound Tyr	<i>AKs+AK-HSDHs+CGS1</i>	0.0300	0.9344
Protein-bound Tyr	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0347	0.9241
Protein-bound Tyr	<i>AKs+AK-HSDHs+TS1</i>	0.2046	0.5707
Protein-bound Tyr	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.2122	0.5562
Protein-bound Tyr	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.2045	0.5710
Protein-bound Tyr	<i>AKs+DHDPSs</i>	-0.0968	0.7901
Protein-bound Tyr	<i>BCAT1</i>	0.3792	0.2799
Protein-bound Tyr	Biosynthetic genes analyzed	0.2394	0.5053
Protein-bound Tyr	Catabolic genes analyzed	0.3434	0.3313
Protein-bound Tyr	<i>CGS1</i>	0.2947	0.4085
Protein-bound Tyr	<i>CGS1/SAMSs</i>	-0.3254	0.3589
Protein-bound Tyr	<i>CGS1/TS1</i>	-0.3598	0.3071
Protein-bound Tyr	<i>DHDPS1</i>	-0.2216	0.5384
Protein-bound Tyr	<i>DHDPS2</i>	0.3715	0.2905
Protein-bound Tyr	<i>DHDPSs</i>	0.1223	0.7365
Protein-bound Tyr	<i>DHDPSs/AK-HSDHs</i>	-0.2815	0.4308
Protein-bound Tyr	<i>DHDPSs/LKR-SDH1</i>	0.3178	0.3709
Protein-bound Tyr	Free (Lys+Met+Thr+Ile)/Asp	0.2206	0.5402
Protein-bound Tyr	Free Ala	0.0919	0.8007
Protein-bound Tyr	Free Arg	-0.3101	0.3833
Protein-bound Tyr	Free Asn	-0.1896	0.5999
Protein-bound Tyr	Free Asn+Asp	-0.2410	0.5025
Protein-bound Tyr	Free Asn+Asp+Lys+Met+Thr+Ile	-0.1076	0.7674
Protein-bound Tyr	Free Asn+Asp+Lys+Thr+Ile	-0.1077	0.7671
Protein-bound Tyr	Free Asp	-0.2496	0.4868
Protein-bound Tyr	Free Asp+Lys+Met+Thr+Ile	-0.0983	0.7870
Protein-bound Tyr	Free Cys	-0.2080	0.5642
Protein-bound Tyr	Free Gln	-0.2073	0.5655
Protein-bound Tyr	Free Glu	-0.2623	0.4641
Protein-bound Tyr	Free Gly	-0.1142	0.7535
Protein-bound Tyr	Free Gly/Thr	0.0010	0.9979
Protein-bound Tyr	Free Gly+Ile	-0.1095	0.7633
Protein-bound Tyr	Free His	-0.0469	0.8976
Protein-bound Tyr	Free Ile	0.0553	0.8794
Protein-bound Tyr	Free Ile/Thr	0.0986	0.7865
Protein-bound Tyr	Free Leu	-0.0836	0.8185
Protein-bound Tyr	Free Lys	-0.2191	0.5431
Protein-bound Tyr	Free Lys/(Met+Thr+Ile)	0.0321	0.9298
Protein-bound Tyr	Free Lys/Asp	0.0204	0.9554
Protein-bound Tyr	Free Lys/Thr	0.0815	0.8229
Protein-bound Tyr	Free Lys+Met+Thr+Ile	0.0003	0.9994

Protein-bound Tyr	Free Met	-0.1744	0.6298
Protein-bound Tyr	Free Met/(Thr+Ile)	-0.0209	0.9543
Protein-bound Tyr	Free Met/Thr	0.0799	0.8264
Protein-bound Tyr	Free Met+Thr+Ile	0.0083	0.9818
Protein-bound Tyr	Free Phe	0.0343	0.9250
Protein-bound Tyr	Free Pro	-0.3068	0.3886
Protein-bound Tyr	Free Ser	-0.1664	0.6459
Protein-bound Tyr	Free Thr	0.0122	0.9734
Protein-bound Tyr	Free Thr/(Gly+Ile)	0.0409	0.9106
Protein-bound Tyr	Free Thr/Asp	0.2168	0.5475
Protein-bound Tyr	Free Trp	0.0484	0.8943
Protein-bound Tyr	Free Tyr	-0.0197	0.9569
Protein-bound Tyr	Free Val	0.3404	0.3358
Protein-bound Tyr	HSDH activity with four effectors	-0.1602	0.6584
Protein-bound Tyr	HSDH activity without effectors	-0.0340	0.9256
Protein-bound Tyr	<i>LKR-SDHI</i>	-0.2408	0.5028
Protein-bound Tyr	Lys-sensitive AK activity	0.2294	0.5238
Protein-bound Tyr	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.2717	0.4476
Protein-bound Tyr	Protein-bound Ala	0.7190	0.0191
Protein-bound Tyr	Protein-bound Arg	0.1815	0.6158
<b>Protein-bound Tyr</b>	<b>Protein-bound Gly</b>	<b>0.6333</b>	<b>0.0493</b>
<b>Protein-bound Tyr</b>	<b>Protein-bound His</b>	<b>0.5423</b>	<b>0.1054</b>
Protein-bound Tyr	Protein-bound Ile	0.2436	0.4976
<b>Protein-bound Tyr</b>	<b>Protein-bound Leu</b>	<b>0.6085</b>	<b>0.0619</b>
<b>Protein-bound Tyr</b>	<b>Protein-bound Lys</b>	<b>0.4266</b>	<b>0.2189</b>
Protein-bound Tyr	Protein-bound Phe	0.3779	0.2816
<b>Protein-bound Tyr</b>	<b>Protein-bound Pro</b>	<b>0.6402</b>	<b>0.0462</b>
<b>Protein-bound Tyr</b>	<b>Protein-bound Ser</b>	<b>0.8506</b>	<b>0.0018</b>
<b>Protein-bound Tyr</b>	<b>Protein-bound Thr</b>	<b>0.7308</b>	<b>0.0163</b>
Protein-bound Tyr	<i>SAMS1</i>	0.0521	0.8862
Protein-bound Tyr	<i>SAMS2</i>	0.0970	0.7898
Protein-bound Tyr	<i>SAMS3</i>	0.3202	0.3671
<b>Protein-bound Tyr</b>	<b><i>SAMS4</i></b>	<b>0.4822</b>	<b>0.1582</b>
Protein-bound Tyr	<i>SAMSs</i>	0.3390	0.3380
Protein-bound Tyr	<i>TD1</i>	0.2198	0.5417
Protein-bound Tyr	<i>TD1/BCAT1</i>	-0.3237	0.3616
Protein-bound Tyr	<i>THA1</i>	-0.1907	0.5977
Protein-bound Tyr	<i>THA2</i>	0.0410	0.9104
Protein-bound Tyr	<i>THAs</i>	0.0349	0.9237
Protein-bound Tyr	<i>THAs+TD1</i>	0.2199	0.5416
<b>Protein-bound Tyr</b>	<b>Thr-sensitive AK activity</b>	<b>0.7326</b>	<b>0.0160</b>
Protein-bound Tyr	Total free AAs	-0.2167	0.5475
<b>Protein-bound Tyr</b>	<b><i>TSI</i></b>	<b>0.5006</b>	<b>0.1406</b>
Protein-bound Tyr	<i>TSI/(THAs+TD1)</i>	0.1923	0.5946
Protein-bound Tyr	<i>TSI/TD1</i>	0.0099	0.9784
Protein-bound Tyr	<i>TSI/THAs</i>	0.1253	0.7301
Protein-bound Val	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.3460	0.3274
Protein-bound Val	<i>(AK-HSDHs+TSI)/(THAs+TD1)</i>	0.2665	0.4567
Protein-bound Val	<i>(AK-HSDHs+TSI+TD1)/BCAT1</i>	-0.0376	0.9178
Protein-bound Val	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.1597	0.6595
Protein-bound Val	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.2405	0.5034
Protein-bound Val	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.3155	0.3745
<b>Protein-bound Val</b>	<b><i>(AKs+AK-HSDHs+TSI)/(THAs+TD1)</i></b>	<b>0.4035</b>	<b>0.2476</b>
Protein-bound Val	<i>(AKs+AK-HSDHs+TSI+TD1)/BCAT1</i>	-0.0289	0.9369
<b>Protein-bound Val</b>	<b><i>(AKs+DHDPSs)/LKR-SDHI</i></b>	<b>0.4183</b>	<b>0.2290</b>
<b>Protein-bound Val</b>	<b>AK activity with four effectors</b>	<b>0.5176</b>	<b>0.1254</b>
<b>Protein-bound Val</b>	<b>AK activity without effectors</b>	<b>0.6148</b>	<b>0.0586</b>
<b>Protein-bound Val</b>	<b>AK activity/HSDH activity with four effectors</b>	<b>0.5690</b>	<b>0.0861</b>

<b>Protein-bound Val</b>	<b>AK activity/HSDH activity without effectors</b>	<b>0.4731</b>	<b>0.1673</b>
<b>Protein-bound Val</b>	<b>AK1</b>	<b>-0.4701</b>	<b>0.1704</b>
Protein-bound Val	AK1+AK2	0.3141	0.3767
<b>Protein-bound Val</b>	<b>AK1+AK3</b>	<b>-0.6943</b>	<b>0.0259</b>
<b>Protein-bound Val</b>	<b>AK2</b>	<b>0.4006</b>	<b>0.2514</b>
Protein-bound Val	AK2+AK3	0.3304	0.3511
Protein-bound Val	AK3	-0.3338	0.3459
Protein-bound Val	AK-HSDH1	0.0325	0.9289
Protein-bound Val	AK-HSDH2	-0.2674	0.4551
Protein-bound Val	AK-HSDHs	-0.1550	0.6690
Protein-bound Val	AK-HSDHs+CGS1	0.0268	0.9413
Protein-bound Val	AK-HSDHs+TS1	-0.0391	0.9146
Protein-bound Val	AK-HSDHs+TS1+TD1	-0.0739	0.8392
Protein-bound Val	AK-HSDHs+TS1+THAs	-0.0325	0.9289
Protein-bound Val	AKs	0.2469	0.4917
Protein-bound Val	AKs/AK-HSDHs	0.1597	0.6595
Protein-bound Val	AKs+AK-HSDHs	0.2145	0.5518
Protein-bound Val	AKs+AK-HSDHs+CGS1	0.2539	0.4791
Protein-bound Val	AKs+AK-HSDHs+DHDPSs	0.1964	0.5866
Protein-bound Val	AKs+AK-HSDHs+TS1	0.1769	0.6250
Protein-bound Val	AKs+AK-HSDHs+TS1+TD1	0.1475	0.6842
Protein-bound Val	AKs+AK-HSDHs+TS1+THAs	0.1816	0.6156
Protein-bound Val	AKs+DHDPSs	0.2295	0.5237
<b>Protein-bound Val</b>	<b>BCAT1</b>	<b>0.6035</b>	<b>0.0647</b>
Protein-bound Val	Biosynthetic genes analyzed	0.1857	0.6075
Protein-bound Val	Catabolic genes analyzed	-0.2006	0.5784
Protein-bound Val	CGS1	0.2191	0.5430
Protein-bound Val	CGS1/SAMSs	0.3264	0.3573
Protein-bound Val	CGS1/TS1	0.2026	0.5746
<b>Protein-bound Val</b>	<b>DHDPS1</b>	<b>-0.5852</b>	<b>0.0756</b>
Protein-bound Val	DHDPS2	-0.0961	0.7918
<b>Protein-bound Val</b>	<b>DHDPSs</b>	<b>-0.4359</b>	<b>0.2080</b>
Protein-bound Val	DHDPSs/AK-HSDHs	-0.0650	0.8585
Protein-bound Val	DHDPSs/LKR-SDH1	-0.0603	0.8687
Protein-bound Val	Free (Lys+Met+Thr+Ile)/Asp	0.3494	0.3223
<b>Protein-bound Val</b>	<b>Free Ala</b>	<b>-0.4389</b>	<b>0.2044</b>
<b>Protein-bound Val</b>	<b>Free Arg</b>	<b>-0.5146</b>	<b>0.1280</b>
<b>Protein-bound Val</b>	<b>Free Asn</b>	<b>-0.6273</b>	<b>0.0522</b>
<b>Protein-bound Val</b>	<b>Free Asn+Asp</b>	<b>-0.6991</b>	<b>0.0245</b>
Protein-bound Val	Free Asn+Asp+Lys+Met+Thr+Ile	-0.3132	0.3782
Protein-bound Val	Free Asn+Asp+Lys+Thr+Ile	-0.3127	0.3790
<b>Protein-bound Val</b>	<b>Free Asp</b>	<b>-0.7023</b>	<b>0.0236</b>
Protein-bound Val	Free Asp+Lys+Met+Thr+Ile	-0.2807	0.4320
Protein-bound Val	Free Cys	-0.2417	0.5011
<b>Protein-bound Val</b>	<b>Free Gln</b>	<b>-0.6664</b>	<b>0.0354</b>
<b>Protein-bound Val</b>	<b>Free Glu</b>	<b>-0.5642</b>	<b>0.0893</b>
<b>Protein-bound Val</b>	<b>Free Gly</b>	<b>-0.6656</b>	<b>0.0357</b>
<b>Protein-bound Val</b>	<b>Free Gly/Thr</b>	<b>-0.4793</b>	<b>0.1610</b>
<b>Protein-bound Val</b>	<b>Free Gly+Ile</b>	<b>-0.6654</b>	<b>0.0357</b>
<b>Protein-bound Val</b>	<b>Free His</b>	<b>-0.4306</b>	<b>0.2142</b>
Protein-bound Val	Free Ile	-0.1060	0.7707
Protein-bound Val	Free Ile/Thr	-0.2158	0.5493
Protein-bound Val	Free Leu	-0.3896	0.2657
Protein-bound Val	Free Lys	-0.3507	0.3204
Protein-bound Val	Free Lys/(Met+Thr+Ile)	-0.2837	0.4271
<b>Protein-bound Val</b>	<b>Free Lys/Asp</b>	<b>0.5330</b>	<b>0.1126</b>
Protein-bound Val	Free Lys/Thr	-0.2728	0.4457
Protein-bound Val	Free Lys+Met+Thr+Ile	0.0047	0.9898



Protein-bound Val	Free Met	-0.3027	0.3953
Protein-bound Val	Free Met/(Thr+Ile)	-0.3112	0.3814
Protein-bound Val	Free Met/Thr	-0.2749	0.4421
Protein-bound Val	Free Met+Thr+Ile	0.0175	0.9616
Protein-bound Val	Free Phe	-0.3614	0.3048
<b>Protein-bound Val</b>	<b>Free Pro</b>	<b>-0.6288</b>	<b>0.0515</b>
<b>Protein-bound Val</b>	<b>Free Ser</b>	<b>-0.7035</b>	<b>0.0232</b>
Protein-bound Val	Free Thr	0.0223	0.9513
Protein-bound Val	Free Thr/(Gly+Ile)	0.1580	0.6628
Protein-bound Val	Free Thr/Asp	0.3280	0.3549
Protein-bound Val	Free Trp	-0.3609	0.3055
Protein-bound Val	Free Tyr	-0.1264	0.7278
Protein-bound Val	Free Val	-0.2145	0.5518
Protein-bound Val	HSDH activity with four effectors	-0.1780	0.6227
Protein-bound Val	HSDH activity without effectors	-0.0377	0.9176
Protein-bound Val	<i>LKR-SDH1</i>	-0.2029	0.5741
<b>Protein-bound Val</b>	<b>Lys-sensitive AK activity</b>	<b>0.6940</b>	<b>0.0260</b>
Protein-bound Val	Lys-sensitive AK activity/Thr-sensitive AK activity	0.0068	0.9850
Protein-bound Val	Protein-bound Ala	0.2421	0.5003
<b>Protein-bound Val</b>	<b>Protein-bound Arg</b>	<b>0.4695</b>	<b>0.1710</b>
Protein-bound Val	Protein-bound Gly	0.3144	0.3763
<b>Protein-bound Val</b>	<b>Protein-bound His</b>	<b>0.6006</b>	<b>0.0663</b>
<b>Protein-bound Val</b>	<b>Protein-bound Ile</b>	<b>0.6772</b>	<b>0.0315</b>
<b>Protein-bound Val</b>	<b>Protein-bound Leu</b>	<b>0.5187</b>	<b>0.1245</b>
<b>Protein-bound Val</b>	<b>Protein-bound Lys</b>	<b>0.4276</b>	<b>0.2177</b>
Protein-bound Val	Protein-bound Phe	0.3245	0.3604
Protein-bound Val	Protein-bound Pro	0.2141	0.5526
<b>Protein-bound Val</b>	<b>Protein-bound Ser</b>	<b>0.4625</b>	<b>0.1783</b>
Protein-bound Val	Protein-bound Thr	0.2164	0.5481
<b>Protein-bound Val</b>	<b>Protein-bound Tyr</b>	<b>0.5436</b>	<b>0.1044</b>
<b>Protein-bound Val</b>	<b><i>SAMS1</i></b>	<b>-0.4695</b>	<b>0.1709</b>
<b>Protein-bound Val</b>	<b><i>SAMS2</i></b>	<b>-0.4532</b>	<b>0.1884</b>
Protein-bound Val	<i>SAMS3</i>	-0.0094	0.9795
Protein-bound Val	<i>SAMS4</i>	-0.1159	0.7499
Protein-bound Val	<i>SAMSs</i>	-0.2025	0.5748
Protein-bound Val	<i>TD1</i>	-0.3776	0.2820
Protein-bound Val	<i>TD1/BCAT1</i>	-0.0850	0.8155
Protein-bound Val	<i>THA1</i>	-0.0591	0.8712
Protein-bound Val	<i>THA2</i>	0.3441	0.3302
Protein-bound Val	<i>THAs</i>	0.3275	0.3556
Protein-bound Val	<i>THAs+TD1</i>	-0.3031	0.3946
Protein-bound Val	Thr-sensitive AK activity	0.2723	0.4466
<b>Protein-bound Val</b>	<b>Total free AAs</b>	<b>-0.6693</b>	<b>0.0343</b>
Protein-bound Val	<i>TS1</i>	0.0180	0.9607
Protein-bound Val	<i>TS1/(THAs+TD1)</i>	0.3930	0.2613
Protein-bound Val	<i>TS1/TD1</i>	0.2785	0.4359
<b>Protein-bound Val</b>	<b><i>TS1/THAs</i></b>	<b>-0.5462</b>	<b>0.1023</b>
<i>SAMS1</i>	<i>AK1</i>	-0.2895	0.4171
<i>SAMS1</i>	<i>AK2</i>	-0.2506	0.4850
<i>SAMS1</i>	<i>AK3</i>	0.3812	0.2771
<i>SAMS1</i>	<i>AK-HSDH1</i>	-0.0943	0.7954
<i>SAMS1</i>	<i>AK-HSDH2</i>	<b>0.4696</b>	<b>0.1709</b>
<i>SAMS1</i>	<i>CGS1</i>	0.3836	0.2738
<i>SAMS1</i>	<i>DHDPS1</i>	<b>0.4308</b>	<b>0.2139</b>
<i>SAMS1</i>	<i>DHDPS2</i>	<b>0.5942</b>	<b>0.0701</b>
<i>SAMS1</i>	<i>LKR-SDH1</i>	-0.0395	0.9136
<i>SAMS1</i>	<i>TD1</i>	<b>0.8548</b>	<b>0.0016</b>
<i>SAMS1</i>	<i>TS1</i>	0.3250	0.3595

SAMS2	AK1	-0.2392	0.5056
SAMS2	AK2	0.1193	0.7427
SAMS2	AK3	0.3721	0.2897
SAMS2	AK-HSDH1	-0.0104	0.9773
SAMS2	AK-HSDH2	0.2592	0.4695
SAMS2	CGS1	0.2819	0.4301
SAMS2	DHDPS1	<b>0.8453</b>	<b>0.0021</b>
SAMS2	DHDPS2	<b>0.5009</b>	<b>0.1403</b>
SAMS2	LKR-SDH1	0.3349	0.3442
SAMS2	SAMS1	<b>0.7006</b>	<b>0.0240</b>
SAMS2	TD1	<b>0.8706</b>	<b>0.0010</b>
SAMS2	TS1	<b>0.6964</b>	<b>0.0253</b>
SAMS3	AK1	0.3539	0.3158
SAMS3	AK2	-0.3061	0.3896
SAMS3	AK3	-0.1379	0.7040
SAMS3	AK-HSDH1	<b>0.7316</b>	<b>0.0162</b>
SAMS3	AK-HSDH2	<b>0.6560</b>	<b>0.0394</b>
SAMS3	CGS1	<b>0.5249</b>	<b>0.1193</b>
SAMS3	DHDPS1	-0.1945	0.5902
SAMS3	DHDPS2	<b>0.6329</b>	<b>0.0495</b>
SAMS3	LKR-SDH1	<b>-0.8280</b>	<b>0.0031</b>
SAMS3	SAMS1	0.0698	0.8480
SAMS3	SAMS2	-0.0442	0.9034
SAMS3	TD1	0.3135	0.3778
SAMS3	TS1	0.3891	0.2664
SAMS4	AK1	-0.1009	0.7816
SAMS4	AK2	-0.2734	0.4447
SAMS4	AK3	0.2312	0.5204
SAMS4	AK-HSDH1	<b>0.6069</b>	<b>0.0628</b>
SAMS4	AK-HSDH2	<b>0.7864</b>	<b>0.0070</b>
SAMS4	CGS1	<b>0.7356</b>	<b>0.0153</b>
SAMS4	DHDPS1	0.0676	0.8529
SAMS4	DHDPS2	<b>0.8838</b>	<b>0.0007</b>
SAMS4	LKR-SDH1	<b>-0.6520</b>	<b>0.0411</b>
SAMS4	SAMS1	<b>0.5837</b>	<b>0.0765</b>
SAMS4	SAMS2	<b>0.4366</b>	<b>0.2071</b>
SAMS4	SAMS3	<b>0.7843</b>	<b>0.0072</b>
SAMS4	TD1	<b>0.7684</b>	<b>0.0094</b>
SAMS4	TS1	<b>0.6848</b>	<b>0.0289</b>
SAMSs	AK1	0.1280	0.7245
SAMSs	AK2	-0.3540	0.3156
SAMSs	AK3	0.0861	0.8132
SAMSs	AK-HSDH1	<b>0.6031</b>	<b>0.0649</b>
SAMSs	AK-HSDH2	<b>0.7847</b>	<b>0.0072</b>
SAMSs	AK-HSDHs	<b>0.8501</b>	<b>0.0018</b>
SAMSs	AKs	-0.3191	0.3689
SAMSs	AKs+AK-HSDHs	-0.1062	0.7703
SAMSs	BCAT1	-0.2747	0.4424
SAMSs	CGS1	<b>0.6521</b>	<b>0.0410</b>
SAMSs	DHDPS1	0.0434	0.9052
SAMSs	DHDPS2	<b>0.8353</b>	<b>0.0026</b>
SAMSs	DHDPSs	<b>0.6161</b>	<b>0.0578</b>
SAMSs	LKR-SDH1	<b>-0.7190</b>	<b>0.0191</b>
SAMSs	SAMS1	<b>0.5227</b>	<b>0.1211</b>
SAMSs	SAMS2	0.3170	0.3722
SAMSs	SAMS3	<b>0.8842</b>	<b>0.0007</b>
SAMSs	SAMS4	<b>0.9601</b>	<b>&lt;.0001</b>

<b>SAMSs</b>	<b>TD1</b>	<b>0.6849</b>	<b>0.0289</b>
<b>SAMSs</b>	<b>THA1</b>	<b>-0.6945</b>	<b>0.0258</b>
SAMSs	THA2	-0.2444	0.4961
<b>SAMSs</b>	<b>TS1</b>	<b>0.5352</b>	<b>0.1109</b>
TD1	AK1	-0.2114	0.5577
TD1	AK2	-0.0076	0.9833
TD1	AK3	0.3489	0.3231
TD1	AK-HSDH1	0.1391	0.7016
<b>TD1</b>	<b>AK-HSDH2</b>	<b>0.6214</b>	<b>0.0552</b>
<b>TD1</b>	<b>CGS1</b>	<b>0.5458</b>	<b>0.1027</b>
<b>TD1</b>	<b>DHDPS1</b>	<b>0.5828</b>	<b>0.0770</b>
<b>TD1</b>	<b>DHDPS2</b>	<b>0.8171</b>	<b>0.0039</b>
<b>TD1</b>	<b>TS1</b>	<b>0.7059</b>	<b>0.0225</b>
TD1/BCAT1	(AK-HSDHs+CGS1)/SAMSs	0.2145	0.5518
TD1/BCAT1	(AK-HSDHs+TS1)/(THAs+TD1)	-0.1662	0.6463
TD1/BCAT1	(AKs+AK-HSDHs)/AK-HSDHs	-0.2397	0.5048
TD1/BCAT1	(AKs+AK-HSDHs+CGS1)/SAMSs	-0.0315	0.9312
TD1/BCAT1	(AKs+AK-HSDHs+DHDPSs)/LKR-SDH1	0.1980	0.5836
TD1/BCAT1	(AKs+AK-HSDHs+TS1)/(THAs+TD1)	-0.2237	0.5344
TD1/BCAT1	(AKs+DHDPSs)/LKR-SDH1	0.1819	0.6150
TD1/BCAT1	AK1	0.0887	0.8075
TD1/BCAT1	AK1+AK2	0.1722	0.6343
TD1/BCAT1	AK1+AK3	-0.3192	0.3687
TD1/BCAT1	AK2	0.1481	0.6831
TD1/BCAT1	AK2+AK3	0.0561	0.8777
<b>TD1/BCAT1</b>	<b>AK3</b>	<b>-0.5029</b>	<b>0.1385</b>
TD1/BCAT1	AK-HSDH1	0.0358	0.9217
<b>TD1/BCAT1</b>	<b>AK-HSDH2</b>	<b>0.4258</b>	<b>0.2198</b>
TD1/BCAT1	AK-HSDHs	0.3040	0.3931
<b>TD1/BCAT1</b>	<b>AK-HSDHs+CGS1</b>	<b>0.4658</b>	<b>0.1748</b>
<b>TD1/BCAT1</b>	<b>AK-HSDHs+TS1</b>	<b>0.4056</b>	<b>0.2449</b>
<b>TD1/BCAT1</b>	<b>AK-HSDHs+TS1+TD1</b>	<b>0.4138</b>	<b>0.2346</b>
<b>TD1/BCAT1</b>	<b>AK-HSDHs+TS1+THAs</b>	<b>0.4083</b>	<b>0.2414</b>
TD1/BCAT1	AKs	0.0776	0.8314
TD1/BCAT1	AKs/AK-HSDHs	-0.2397	0.5048
TD1/BCAT1	AKs+AK-HSDHs	0.1606	0.6576
TD1/BCAT1	AKs+AK-HSDHs+CGS1	0.2778	0.4371
TD1/BCAT1	AKs+AK-HSDHs+DHDPSs	0.1800	0.6189
TD1/BCAT1	AKs+AK-HSDHs+TS1	0.3136	0.3776
TD1/BCAT1	AKs+AK-HSDHs+TS1+TD1	0.3276	0.3554
TD1/BCAT1	AKs+AK-HSDHs+TS1+THAs	0.3128	0.3788
TD1/BCAT1	AKs+DHDPSs	0.0993	0.7848
<b>TD1/BCAT1</b>	<b>BCAT1</b>	<b>-0.5344</b>	<b>0.1115</b>
TD1/BCAT1	Biosynthetic genes analyzed	0.3928	0.2615
TD1/BCAT1	Catabolic genes analyzed	0.2680	0.4540
<b>TD1/BCAT1</b>	<b>CGS1</b>	<b>0.5507</b>	<b>0.0990</b>
TD1/BCAT1	CGS1/SAMSs	0.0319	0.9303
TD1/BCAT1	DHDPS1	0.3264	0.3573
<b>TD1/BCAT1</b>	<b>DHDPS2</b>	<b>0.5140</b>	<b>0.1285</b>
<b>TD1/BCAT1</b>	<b>DHDPSs</b>	<b>0.5331</b>	<b>0.1126</b>
TD1/BCAT1	DHDPSs/LKR-SDH1	0.3954	0.2580
TD1/BCAT1	LKR-SDH1	-0.2622	0.4642
TD1/BCAT1	SAMS1	0.2474	0.4908
TD1/BCAT1	SAMS2	0.2917	0.4135
TD1/BCAT1	SAMS3	0.1845	0.6098
TD1/BCAT1	SAMS4	0.2393	0.5054
TD1/BCAT1	SAMSs	0.2692	0.4520

<i>TD1/BCAT1</i>	<i>TD1</i>	0.3848	0.2722
<i>TD1/BCAT1</i>	<i>THA1</i>	-0.2797	0.4338
<i>TD1/BCAT1</i>	<i>THA2</i>	0.2099	0.5605
<i>TD1/BCAT1</i>	<i>THAs</i>	0.1771	0.6246
<b><i>TD1/BCAT1</i></b>	<b><i>THAs+TD1</i></b>	<b>0.4086</b>	<b>0.2411</b>
<i>TD1/BCAT1</i>	<i>TS1</i>	0.3990	0.2534
<i>TD1/BCAT1</i>	<i>TS1/(THAs+TD1)</i>	-0.2167	0.5476
<i>TD1/BCAT1</i>	<i>TS1/TD1</i>	-0.2972	0.4044
<i>TD1/BCAT1</i>	<i>TS1/THAs</i>	0.2051	0.5697
<i>THA1</i>	<i>AK1</i>	-0.1408	0.6981
<i>THA1</i>	<i>AK2</i>	-0.0187	0.9591
<i>THA1</i>	<i>AK3</i>	0.0085	0.9815
<i>THA1</i>	<i>AK-HSDH1</i>	-0.2561	0.4752
<b><i>THA1</i></b>	<b><i>AK-HSDH2</i></b>	<b>-0.6294</b>	<b>0.0512</b>
<b><i>THA1</i></b>	<b><i>CGS1</i></b>	<b>-0.7264</b>	<b>0.0174</b>
<i>THA1</i>	<i>DHDPS1</i>	0.2970	0.4047
<b><i>THA1</i></b>	<b><i>DHDPS2</i></b>	<b>-0.5938</b>	<b>0.0703</b>
<b><i>THA1</i></b>	<b><i>LKR-SDH1</i></b>	<b>0.7715</b>	<b>0.0090</b>
<i>THA1</i>	<i>SAMS1</i>	-0.1744	0.6300
<i>THA1</i>	<i>SAMS2</i>	-0.0077	0.9831
<b><i>THA1</i></b>	<b><i>SAMS3</i></b>	<b>-0.7204</b>	<b>0.0188</b>
<b><i>THA1</i></b>	<b><i>SAMS4</i></b>	<b>-0.6378</b>	<b>0.0473</b>
<i>THA1</i>	<i>TD1</i>	-0.3286	0.3539
<i>THA1</i>	<i>TS1</i>	-0.2839	0.4267
<b><i>THA2</i></b>	<b><i>AK1</i></b>	<b>-0.5485</b>	<b>0.1006</b>
<b><i>THA2</i></b>	<b><i>AK2</i></b>	<b>0.5699</b>	<b>0.0855</b>
<i>THA2</i>	<i>AK3</i>	-0.0360	0.9213
<i>THA2</i>	<i>AK-HSDH1</i>	-0.1918	0.5956
<i>THA2</i>	<i>AK-HSDH2</i>	-0.2811	0.4315
<b><i>THA2</i></b>	<b><i>CGS1</i></b>	<b>0.4047</b>	<b>0.2460</b>
<i>THA2</i>	<i>DHDPS1</i>	0.1607	0.6573
<i>THA2</i>	<i>DHDPS2</i>	-0.1055	0.7718
<i>THA2</i>	<i>LKR-SDH1</i>	0.2405	0.5032
<i>THA2</i>	<i>SAMS1</i>	-0.0547	0.8808
<i>THA2</i>	<i>SAMS2</i>	0.3112	0.3815
<i>THA2</i>	<i>SAMS3</i>	-0.2948	0.4083
<i>THA2</i>	<i>SAMS4</i>	-0.1184	0.7446
<i>THA2</i>	<i>TD1</i>	0.0908	0.8029
<i>THA2</i>	<i>THA1</i>	-0.1650	0.6488
<i>THA2</i>	<i>TS1</i>	0.3127	0.3790
<b><i>THAs</i></b>	<b><i>AK1</i></b>	<b>-0.5194</b>	<b>0.1239</b>
<b><i>THAs</i></b>	<b><i>AK2</i></b>	<b>0.6385</b>	<b>0.0469</b>
<i>THAs</i>	<i>AK3</i>	-0.0082	0.9820
<i>THAs</i>	<i>AK-HSDH1</i>	-0.3040	0.3931
<i>THAs</i>	<i>AK-HSDH2</i>	-0.3393	0.3375
<i>THAs</i>	<i>AK-HSDHs</i>	-0.3898	0.2655
<b><i>THAs</i></b>	<b><i>AKs</i></b>	<b>0.5391</b>	<b>0.1079</b>
<b><i>THAs</i></b>	<b><i>AKs+AK-HSDHs</i></b>	<b>0.4569</b>	<b>0.1843</b>
<i>THAs</i>	<i>BCAT1</i>	-0.1238	0.7334
<i>THAs</i>	<i>CGS1</i>	0.2937	0.4102
<i>THAs</i>	<i>DHDPS1</i>	0.2217	0.5381
<i>THAs</i>	<i>DHDPS2</i>	-0.1442	0.6910
<i>THAs</i>	<i>DHDPSs</i>	0.0116	0.9745
<i>THAs</i>	<i>LKR-SDH1</i>	0.3631	0.3024
<i>THAs</i>	<i>SAMS1</i>	-0.0752	0.8364
<i>THAs</i>	<i>SAMS2</i>	0.3395	0.3372
<i>THAs</i>	<i>SAMS3</i>	-0.3988	0.2536

<i>THAs</i>	<i>SAMS4</i>	-0.2084	0.5635
<i>THAs</i>	<i>SAMSs</i>	-0.3420	0.3334
<i>THAs</i>	<i>TD1</i>	0.0734	0.8403
<i>THAs</i>	<i>THA1</i>	-0.0776	0.8313
<b><i>THAs</i></b>	<b><i>THA2</i></b>	<b>0.9853</b>	<b>&lt;.0001</b>
<i>THAs</i>	<i>TS1</i>	0.2878	0.4201
<i>THAs+TD1</i>	<i>AK1</i>	-0.3078	0.3870
<i>THAs+TD1</i>	<i>AK2</i>	0.1058	0.7711
<i>THAs+TD1</i>	<i>AK3</i>	0.3295	0.3526
<i>THAs+TD1</i>	<i>AK-HSDH1</i>	0.0907	0.8032
<b><i>THAs+TD1</i></b>	<b><i>AK-HSDH2</i></b>	<b>0.5287</b>	<b>0.1161</b>
<i>THAs+TD1</i>	<i>AK-HSDHs</i>	0.3962	0.2570
<i>THAs+TD1</i>	<i>AKs</i>	0.1017	0.7798
<i>THAs+TD1</i>	<i>AKs+AK-HSDHs</i>	0.2108	0.5587
<b><i>THAs+TD1</i></b>	<b><i>BCAT1</i></b>	<b>-0.7561</b>	<b>0.0114</b>
<b><i>THAs+TD1</i></b>	<b>Biosynthetic genes analyzed</b>	<b>0.5924</b>	<b>0.0711</b>
<b><i>THAs+TD1</i></b>	<b>Catabolic genes analyzed</b>	<b>0.6011</b>	<b>0.0661</b>
<b><i>THAs+TD1</i></b>	<b><i>CGS1</i></b>	<b>0.5880</b>	<b>0.0738</b>
<b><i>THAs+TD1</i></b>	<b><i>DHDPS1</i></b>	<b>0.6121</b>	<b>0.0600</b>
<b><i>THAs+TD1</i></b>	<b><i>DHDPS2</i></b>	<b>0.7578</b>	<b>0.0111</b>
<b><i>THAs+TD1</i></b>	<b><i>DHDPSs</i></b>	<b>0.8914</b>	<b>0.0005</b>
<i>THAs+TD1</i>	<i>LKR-SDHI</i>	-0.0329	0.9282
<b><i>THAs+TD1</i></b>	<b><i>SAMS1</i></b>	<b>0.8094</b>	<b>0.0046</b>
<b><i>THAs+TD1</i></b>	<b><i>SAMS2</i></b>	<b>0.9108</b>	<b>0.0002</b>
<i>THAs+TD1</i>	<i>SAMS3</i>	0.2282	0.5260
<b><i>THAs+TD1</i></b>	<b><i>SAMS4</i></b>	<b>0.7045</b>	<b>0.0229</b>
<b><i>THAs+TD1</i></b>	<b><i>SAMSs</i></b>	<b>0.5972</b>	<b>0.0683</b>
<b><i>THAs+TD1</i></b>	<b><i>TD1</i></b>	<b>0.9802</b>	<b>&lt;.0001</b>
<i>THAs+TD1</i>	<i>THA1</i>	-0.3278	0.3551
<i>THAs+TD1</i>	<i>THA2</i>	0.2839	0.4266
<i>THAs+TD1</i>	<i>THAs</i>	0.2679	0.4542
<b><i>THAs+TD1</i></b>	<b><i>TS1</i></b>	<b>0.7461</b>	<b>0.0132</b>
Thr-sensitive AK activity	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.1450	0.6894
Thr-sensitive AK activity	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.3507	0.3204
Thr-sensitive AK activity	<i>(AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1165	0.7487
<b>Thr-sensitive AK activity</b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>-0.6731</b>	<b>0.0329</b>
<b>Thr-sensitive AK activity</b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>-0.5630</b>	<b>0.0901</b>
Thr-sensitive AK activity	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.2151	0.5506
Thr-sensitive AK activity	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	-0.0105	0.9770
Thr-sensitive AK activity	<i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i>	-0.1405	0.6986
Thr-sensitive AK activity	<i>(AKs+DHDPSs)/LKR-SDHI</i>	0.0685	0.8509
Thr-sensitive AK activity	AK activity with four effectors	-0.0753	0.8363
Thr-sensitive AK activity	AK activity without effectors	-0.0301	0.9343
Thr-sensitive AK activity	AK activity/HSDH activity with four effectors	-0.2141	0.5526
Thr-sensitive AK activity	AK activity/HSDH activity without effectors	-0.2429	0.4990
Thr-sensitive AK activity	<i>AK1</i>	-0.2532	0.4803
<b>Thr-sensitive AK activity</b>	<b><i>AK1+AK2</i></b>	<b>-0.5023</b>	<b>0.1390</b>
Thr-sensitive AK activity	<i>AK1+AK3</i>	-0.1250	0.7308
<b>Thr-sensitive AK activity</b>	<b><i>AK2</i></b>	<b>-0.4321</b>	<b>0.2124</b>
Thr-sensitive AK activity	<i>AK2+AK3</i>	-0.3956	0.2578
Thr-sensitive AK activity	<i>AK3</i>	0.1413	0.6970
<b>Thr-sensitive AK activity</b>	<b><i>AK-HSDH1</i></b>	<b>0.5687</b>	<b>0.0863</b>
Thr-sensitive AK activity	<i>AK-HSDH2</i>	0.3352	0.3438
<b>Thr-sensitive AK activity</b>	<b><i>AK-HSDHs</i></b>	<b>0.5370</b>	<b>0.1095</b>
<b>Thr-sensitive AK activity</b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>0.4561</b>	<b>0.1853</b>
<b>Thr-sensitive AK activity</b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.5097</b>	<b>0.1324</b>
<b>Thr-sensitive AK activity</b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>0.4913</b>	<b>0.1493</b>

<b>Thr-sensitive AK activity</b>	<i>AK-HSDHs+TSI+THAs</i>	<b>0.5006</b>	<b>0.1406</b>
<b>Thr-sensitive AK activity</b>	<i>AKs</i>	<b>-0.4689</b>	<b>0.1716</b>
<b>Thr-sensitive AK activity</b>	<i>AKs/AK-HSDHs</i>	<b>-0.6731</b>	<b>0.0329</b>
Thr-sensitive AK activity	<i>AKs+AK-HSDHs</i>	-0.3466	0.3265
Thr-sensitive AK activity	<i>AKs+AK-HSDHs+CGSI</i>	-0.2623	0.4641
Thr-sensitive AK activity	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.3369	0.3411
Thr-sensitive AK activity	<i>AKs+AK-HSDHs+TSI</i>	-0.0684	0.8510
Thr-sensitive AK activity	<i>AKs+AK-HSDHs+TSI+TD1</i>	-0.0544	0.8813
Thr-sensitive AK activity	<i>AKs+AK-HSDHs+TSI+THAs</i>	-0.0742	0.8387
<b>Thr-sensitive AK activity</b>	<i>AKs+DHDPSs</i>	<b>-0.4603</b>	<b>0.1807</b>
Thr-sensitive AK activity	<i>BCAT1</i>	0.2526	0.4813
Thr-sensitive AK activity	Biosynthetic genes analyzed	-0.0082	0.9822
<b>Thr-sensitive AK activity</b>	<b>Catabolic genes analyzed</b>	<b>0.4087</b>	<b>0.2410</b>
Thr-sensitive AK activity	<i>CGSI</i>	0.2813	0.4311
<b>Thr-sensitive AK activity</b>	<i>CGSI/SAMSs</i>	<b>-0.4061</b>	<b>0.2443</b>
Thr-sensitive AK activity	<i>CGSI/TSI</i>	-0.3427	0.3324
Thr-sensitive AK activity	<i>DHDPS1</i>	-0.2646	0.4600
<b>Thr-sensitive AK activity</b>	<i>DHDPS2</i>	<b>0.4587</b>	<b>0.1824</b>
Thr-sensitive AK activity	<i>DHDPSs</i>	0.1495	0.6801
<b>Thr-sensitive AK activity</b>	<i>DHDPSs/AK-HSDHs</i>	<b>-0.5679</b>	<b>0.0868</b>
<b>Thr-sensitive AK activity</b>	<i>DHDPSs/LKR-SDHI</i>	<b>0.5414</b>	<b>0.1061</b>
Thr-sensitive AK activity	HSDH activity with four effectors	0.1451	0.6891
Thr-sensitive AK activity	HSDH activity without effectors	0.1835	0.6119
<b>Thr-sensitive AK activity</b>	<i>LKR-SDHI</i>	<b>-0.4171</b>	<b>0.2305</b>
Thr-sensitive AK activity	Lys-sensitive AK activity	-0.1994	0.5808
Thr-sensitive AK activity	<i>SAMS1</i>	0.1693	0.6400
Thr-sensitive AK activity	<i>SAMS2</i>	-0.0155	0.9660
Thr-sensitive AK activity	<i>SAMS3</i>	0.3504	0.3209
<b>Thr-sensitive AK activity</b>	<i>SAMS4</i>	<b>0.5307</b>	<b>0.1145</b>
<b>Thr-sensitive AK activity</b>	<i>SAMSs</i>	<b>0.4076</b>	<b>0.2423</b>
Thr-sensitive AK activity	<i>TD1</i>	0.2030	0.5737
Thr-sensitive AK activity	<i>TD1/BCAT1</i>	-0.1117	0.7587
Thr-sensitive AK activity	<i>THA1</i>	-0.0024	0.9947
<b>Thr-sensitive AK activity</b>	<i>THA2</i>	<b>-0.4015</b>	<b>0.2501</b>
<b>Thr-sensitive AK activity</b>	<i>THAs</i>	<b>-0.4319</b>	<b>0.2126</b>
Thr-sensitive AK activity	<i>THAs+TD1</i>	0.1161	0.7494
<b>Thr-sensitive AK activity</b>	<i>TSI</i>	<b>0.4308</b>	<b>0.2139</b>
Thr-sensitive AK activity	<i>TSI/(THAs+TD1)</i>	0.3397	0.3370
Thr-sensitive AK activity	<i>TSI/TD1</i>	0.1851	0.6087
Thr-sensitive AK activity	<i>TSI/THAs</i>	0.3774	0.2823
<b>Total free AAs</b>	<i>(AK-HSDHs+CGSI)/SAMSs</i>	<b>-0.4226</b>	<b>0.2237</b>
<b>Total free AAs</b>	<i>(AK-HSDHs+TSI)/(THAs+TD1)</i>	<b>-0.6950</b>	<b>0.0257</b>
Total free AAs	<i>(AK-HSDHs+TSI+TD1)/BCAT1</i>	0.2928	0.4117
Total free AAs	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	0.0759	0.8350
Total free AAs	<i>(AKs+AK-HSDHs+CGSI)/SAMSs</i>	-0.0119	0.9739
Total free AAs	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.1268	0.7270
<b>Total free AAs</b>	<i>(AKs+AK-HSDHs+TSI)/(THAs+TD1)</i>	<b>-0.6258</b>	<b>0.0529</b>
Total free AAs	<i>(AKs+AK-HSDHs+TSI+TD1)/BCAT1</i>	0.3024	0.3958
Total free AAs	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.1379	0.7040
Total free AAs	AK activity with four effectors	-0.1964	0.5866
Total free AAs	AK activity without effectors	-0.3820	0.2759
Total free AAs	AK activity/HSDH activity with four effectors	-0.0858	0.8136
Total free AAs	AK activity/HSDH activity without effectors	0.0314	0.9314
Total free AAs	<i>AK1</i>	0.1297	0.7210
Total free AAs	<i>AK1+AK2</i>	0.1372	0.7055
Total free AAs	<i>AK1+AK3</i>	0.3986	0.2539
Total free AAs	<i>AK2</i>	0.1059	0.7710

Total free AAs	AK2+AK3	0.1640	0.6508
Total free AAs	AK3	0.3505	0.3207
Total free AAs	AK-HSDH1	-0.2913	0.4141
<b>Total free AAs</b>	<b>AK-HSDH2</b>	<b>0.4869</b>	<b>0.1535</b>
Total free AAs	AK-HSDHs	0.1533	0.6725
Total free AAs	AK-HSDHs+CGSI	0.1724	0.6340
Total free AAs	AK-HSDHs+TSI	0.2965	0.4055
Total free AAs	AK-HSDHs+TSI+TDI	0.3552	0.3138
Total free AAs	AK-HSDHs+TSI+THAs	0.2950	0.4079
Total free AAs	AKs	0.1991	0.5812
Total free AAs	AKs/AK-HSDHs	0.0759	0.8350
Total free AAs	AKs+AK-HSDHs	0.2483	0.4891
Total free AAs	AKs+AK-HSDHs+CGSI	0.2705	0.4498
Total free AAs	AKs+AK-HSDHs+DHDPSs	0.2774	0.4377
Total free AAs	AKs+AK-HSDHs+TSI	0.3448	0.3292
Total free AAs	AKs+AK-HSDHs+TSI+TDI	0.3863	0.2702
Total free AAs	AKs+AK-HSDHs+TSI+THAs	0.3417	0.3339
Total free AAs	AKs+DHDPSs	0.2307	0.5214
<b>Total free AAs</b>	<b>BCATI</b>	<b>-0.9032</b>	<b>0.0003</b>
Total free AAs	Biosynthetic genes analyzed	0.3620	0.3040
Total free AAs	Catabolic genes analyzed	0.3967	0.2563
Total free AAs	CGSI	0.1643	0.6502
Total free AAs	CGSI/SAMSs	-0.3242	0.3608
Total free AAs	CGSI/TSI	-0.1636	0.6515
<b>Total free AAs</b>	<b>DHDPS1</b>	<b>0.6898</b>	<b>0.0273</b>
<b>Total free AAs</b>	<b>DHDPS2</b>	<b>0.5580</b>	<b>0.0937</b>
<b>Total free AAs</b>	<b>DHDPSs</b>	<b>0.8164</b>	<b>0.0040</b>
Total free AAs	DHDPSs/AK-HSDHs	0.1041	0.7747
Total free AAs	DHDPSs/LKR-SDH1	0.2007	0.5783
<b>Total free AAs</b>	<b>Free Ala</b>	<b>0.7601</b>	<b>0.0107</b>
<b>Total free AAs</b>	<b>Free Arg</b>	<b>0.6492</b>	<b>0.0422</b>
<b>Total free AAs</b>	<b>Free Asn</b>	<b>0.9477</b>	<b>&lt;.0001</b>
<b>Total free AAs</b>	<b>Free Asp</b>	<b>0.9222</b>	<b>0.0001</b>
<b>Total free AAs</b>	<b>Free Cys</b>	<b>0.5121</b>	<b>0.1302</b>
<b>Total free AAs</b>	<b>Free Gln</b>	<b>0.9326</b>	<b>&lt;.0001</b>
<b>Total free AAs</b>	<b>Free Glu</b>	<b>0.9050</b>	<b>0.0003</b>
<b>Total free AAs</b>	<b>Free Gly</b>	<b>0.8154</b>	<b>0.0040</b>
<b>Total free AAs</b>	<b>Free His</b>	<b>0.8132</b>	<b>0.0042</b>
Total free AAs	Free Ile	0.3873	0.2688
<b>Total free AAs</b>	<b>Free Leu</b>	<b>0.7444</b>	<b>0.0135</b>
<b>Total free AAs</b>	<b>Free Lys</b>	<b>0.7577</b>	<b>0.0111</b>
<b>Total free AAs</b>	<b>Free Met</b>	<b>0.6353</b>	<b>0.0484</b>
<b>Total free AAs</b>	<b>Free Phe</b>	<b>0.6639</b>	<b>0.0363</b>
<b>Total free AAs</b>	<b>Free Pro</b>	<b>0.9278</b>	<b>0.0001</b>
<b>Total free AAs</b>	<b>Free Ser</b>	<b>0.5503</b>	<b>0.0993</b>
Total free AAs	Free Thr	0.1779	0.6230
<b>Total free AAs</b>	<b>Free Trp</b>	<b>0.5808</b>	<b>0.0783</b>
Total free AAs	Free Tyr	0.3809	0.2776
<b>Total free AAs</b>	<b>Free Val</b>	<b>0.5218</b>	<b>0.1219</b>
Total free AAs	HSDH activity with four effectors	0.0826	0.8206
Total free AAs	HSDH activity without effectors	-0.2204	0.5407
Total free AAs	LKR-SDH1	0.1574	0.6641
<b>Total free AAs</b>	<b>Lys-sensitive AK activity</b>	<b>-0.5124</b>	<b>0.1300</b>
Total free AAs	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.0057	0.9875
<b>Total free AAs</b>	<b>SAMS1</b>	<b>0.7679</b>	<b>0.0095</b>
<b>Total free AAs</b>	<b>SAMS2</b>	<b>0.7851</b>	<b>0.0071</b>
Total free AAs	SAMS3	0.0522	0.8860
Total free AAs	SAMS4	0.3911	0.2638

Total free AAs	<i>SAMSs</i>	0.3957	0.2577
<b>Total free AAs</b>	<b><i>TD1</i></b>	<b>-0.8165</b>	<b>0.0039</b>
Total free AAs	<i>TD1/BCAT1</i>	0.3548	0.3145
Total free AAs	<i>THA1</i>	-0.2158	0.5493
Total free AAs	<i>THA2</i>	-0.0138	0.9698
Total free AAs	<i>THAs</i>	0.0276	0.9397
<b>Total free AAs</b>	<b><i>THAs+TD1</i></b>	<b>0.7870</b>	<b>0.0069</b>
Total free AAs	Thr-sensitive AK activity	-0.2384	0.5071
Total free AAs	<i>TS1</i>	0.3194	0.3684
<b>Total free AAs</b>	<b><i>TS1/(THAs+TD1)</i></b>	<b>-0.8161</b>	<b>0.0040</b>
<b>Total free AAs</b>	<b><i>TS1/TD1</i></b>	<b>-0.7720</b>	<b>0.0089</b>
<b>Total free AAs</b>	<b><i>TS1/THAs</i></b>	<b>0.5054</b>	<b>0.1362</b>
Total protein-bound AAs	<i>(AK-HSDHs+CGS1)/SAMSs</i>	-0.2541	0.4787
Total protein-bound AAs	<i>(AK-HSDHs+TS1)/(THAs+TD1)</i>	0.3971	0.2559
<b>Total protein-bound AAs</b>	<b><i>(AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.5145</b>	<b>0.1281</b>
Total protein-bound AAs	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2913	0.4141
Total protein-bound AAs	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	-0.2827	0.4287
Total protein-bound AAs	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	-0.0528	0.8848
Total protein-bound AAs	<i>(AKs+AK-HSDHs+TS1)/(THAs+TD1)</i>	0.1724	0.6339
<b>Total protein-bound AAs</b>	<b><i>(AKs+AK-HSDHs+TS1+TD1)/BCAT1</i></b>	<b>-0.5341</b>	<b>0.1117</b>
Total protein-bound AAs	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.1243	0.7323
Total protein-bound AAs	AK activity with four effectors	-0.0216	0.9528
Total protein-bound AAs	AK activity without effectors	0.2226	0.5365
Total protein-bound AAs	AK activity/HSDH activity with four effectors	0.0158	0.9654
Total protein-bound AAs	AK activity/HSDH activity without effectors	-0.1233	0.7344
Total protein-bound AAs	<i>AK1</i>	-0.1735	0.6316
Total protein-bound AAs	<i>AK1+AK2</i>	-0.2899	0.4165
Total protein-bound AAs	<i>AK1+AK3</i>	-0.1254	0.7299
Total protein-bound AAs	<i>AK2</i>	-0.2447	0.4957
Total protein-bound AAs	<i>AK2+AK3</i>	-0.2305	0.5217
Total protein-bound AAs	<i>AK3</i>	0.0377	0.9177
<b>Total protein-bound AAs</b>	<b><i>AK-HSDHI</i></b>	<b>0.5334</b>	<b>0.1123</b>
Total protein-bound AAs	<i>AK-HSDH2</i>	-0.2747	0.4425
Total protein-bound AAs	<i>AK-HSDHs</i>	0.1186	0.7441
Total protein-bound AAs	<i>AK-HSDHs+CGS1</i>	-0.0322	0.9297
Total protein-bound AAs	<i>AK-HSDHs+TS1</i>	0.2392	0.5057
Total protein-bound AAs	<i>AK-HSDHs+TS1+TD1</i>	0.2105	0.5595
Total protein-bound AAs	<i>AK-HSDHs+TS1+THAs</i>	0.2358	0.5119
Total protein-bound AAs	<i>AKs</i>	-0.2787	0.4356
Total protein-bound AAs	<i>AKs/AK-HSDHs</i>	-0.2913	0.4141
Total protein-bound AAs	<i>AKs+AK-HSDHs</i>	-0.2589	0.4701
Total protein-bound AAs	<i>AKs+AK-HSDHs+CGS1</i>	-0.2862	0.4228
Total protein-bound AAs	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.2602	0.4678
Total protein-bound AAs	<i>AKs+AK-HSDHs+TS1</i>	-0.0794	0.8273
Total protein-bound AAs	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.0848	0.8159
Total protein-bound AAs	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.0812	0.8235
Total protein-bound AAs	<i>AKs+DHDPSs</i>	-0.2820	0.4298
<b>Total protein-bound AAs</b>	<b><i>BCAT1</i></b>	<b>0.6417</b>	<b>0.0455</b>
Total protein-bound AAs	Biosynthetic genes analyzed	-0.1062	0.7704
Total protein-bound AAs	Catabolic genes analyzed	0.0603	0.8685
Total protein-bound AAs	<i>CGS1</i>	-0.1871	0.6048
Total protein-bound AAs	<i>CGS1/SAMSs</i>	-0.2945	0.4088
<b>Total protein-bound AAs</b>	<b><i>CGS1/TS1</i></b>	<b>-0.5529</b>	<b>0.0974</b>
Total protein-bound AAs	<i>DHDPS1</i>	-0.1061	0.7706
Total protein-bound AAs	<i>DHDPS2</i>	-0.0719	0.8436
Total protein-bound AAs	<i>DHDPSs</i>	-0.1115	0.7592
Total protein-bound AAs	<i>DHDPSs/AK-HSDHs</i>	-0.1971	0.5852



Total protein-bound AAs	<i>DHDPSs/LKR-SDHI</i>	0.0560	0.8780
Total protein-bound AAs	Free (Lys+Met+Thr+Ile)/Asp	0.3087	0.3854
Total protein-bound AAs	Free Ala	-0.1652	0.6483
<b>Total protein-bound AAs</b>	<b>Free Arg</b>	<b>-0.6143</b>	<b>0.0588</b>
<b>Total protein-bound AAs</b>	<b>Free Asn</b>	<b>-0.5289</b>	<b>0.1160</b>
<b>Total protein-bound AAs</b>	<b>Free Asn+Asp</b>	<b>-0.4868</b>	<b>0.1537</b>
Total protein-bound AAs	Free Asn+Asp+Lys+Met+Thr+Ile	-0.1624	0.6540
Total protein-bound AAs	Free Asn+Asp+Lys+Thr+Ile	-0.1576	0.6638
<b>Total protein-bound AAs</b>	<b>Free Asp</b>	<b>-0.4756</b>	<b>0.1647</b>
Total protein-bound AAs	Free Asp+Lys+Met+Thr+Ile	-0.1286	0.7233
Total protein-bound AAs	Free Cys	-0.2031	0.5736
<b>Total protein-bound AAs</b>	<b>Free Gln</b>	<b>-0.5279</b>	<b>0.1168</b>
<b>Total protein-bound AAs</b>	<b>Free Glu</b>	<b>-0.5564</b>	<b>0.0949</b>
Total protein-bound AAs	Free Gly	-0.2307	0.5213
Total protein-bound AAs	Free Gly/Thr	0.0906	0.8034
Total protein-bound AAs	Free Gly+Ile	-0.2331	0.5169
<b>Total protein-bound AAs</b>	<b>Free His</b>	<b>-0.4985</b>	<b>0.1425</b>
Total protein-bound AAs	Free Ile	-0.0747	0.8374
Total protein-bound AAs	Free Ile/Thr	0.1803	0.6181
<b>Total protein-bound AAs</b>	<b>Free Leu</b>	<b>-0.4207</b>	<b>0.2260</b>
<b>Total protein-bound AAs</b>	<b>Free Lys</b>	<b>-0.5975</b>	<b>0.0681</b>
Total protein-bound AAs	Free Lys/(Met+Thr+Ile)	0.0524	0.8856
Total protein-bound AAs	Free Lys/Asp	0.0197	0.9569
Total protein-bound AAs	Free Lys/Thr	0.0935	0.7972
Total protein-bound AAs	Free Lys+Met+Thr+Ile	0.0651	0.8582
<b>Total protein-bound AAs</b>	<b>Free Met</b>	<b>-0.5676</b>	<b>0.0870</b>
Total protein-bound AAs	Free Met/(Thr+Ile)	0.0303	0.9337
Total protein-bound AAs	Free Met/Thr	0.1081	0.7664
Total protein-bound AAs	Free Met+Thr+Ile	0.0870	0.8112
Total protein-bound AAs	Free Phe	-0.2803	0.4328
<b>Total protein-bound AAs</b>	<b>Free Pro</b>	<b>-0.6190</b>	<b>0.0564</b>
Total protein-bound AAs	Free Ser	-0.1352	0.7096
Total protein-bound AAs	Free Thr	0.0961	0.7917
Total protein-bound AAs	Free Thr/(Gly+Ile)	0.1192	0.7429
Total protein-bound AAs	Free Thr/Asp	0.3085	0.3858
Total protein-bound AAs	Free Trp	-0.2095	0.5614
Total protein-bound AAs	Free Tyr	-0.3254	0.3589
Total protein-bound AAs	Free Val	-0.0374	0.9183
Total protein-bound AAs	HSDH activity with four effectors	-0.2038	0.5722
Total protein-bound AAs	HSDH activity without effectors	0.1221	0.7369
Total protein-bound AAs	<i>LKR-SDHI</i>	0.0452	0.9013
Total protein-bound AAs	Lys-sensitive AK activity	0.2206	0.5403
Total protein-bound AAs	Lys-sensitive AK activity/Thr-sensitive AK activity	-0.3824	0.2755
<b>Total protein-bound AAs</b>	<b>Protein-bound Ala</b>	<b>0.9634</b>	<b>&lt;.0001</b>
<b>Total protein-bound AAs</b>	<b>Protein-bound Arg</b>	<b>0.4636</b>	<b>0.1772</b>
<b>Total protein-bound AAs</b>	<b>Protein-bound Gly</b>	<b>0.9009</b>	<b>0.0004</b>
Total protein-bound AAs	Protein-bound His	0.3426	0.3325
<b>Total protein-bound AAs</b>	<b>Protein-bound Ile</b>	<b>0.4820</b>	<b>0.1584</b>
<b>Total protein-bound AAs</b>	<b>Protein-bound Leu</b>	<b>0.5012</b>	<b>0.1400</b>
Total protein-bound AAs	Protein-bound Lys	0.3598	0.3072
Total protein-bound AAs	Protein-bound Phe	0.3079	0.3867
<b>Total protein-bound AAs</b>	<b>Protein-bound Pro</b>	<b>0.9638</b>	<b>&lt;.0001</b>
<b>Total protein-bound AAs</b>	<b>Protein-bound Ser</b>	<b>0.9434</b>	<b>&lt;.0001</b>
<b>Total protein-bound AAs</b>	<b>Protein-bound Thr</b>	<b>0.9471</b>	<b>&lt;.0001</b>
<b>Total protein-bound AAs</b>	<b>Protein-bound Tyr</b>	<b>0.7450</b>	<b>0.0134</b>
Total protein-bound AAs	Protein-bound Val	0.3924	0.2620
Total protein-bound AAs	<i>SAMS1</i>	-0.2572	0.4732
Total protein-bound AAs	<i>SAMS2</i>	-0.0828	0.8202

Total protein-bound AAs	SAMS3	0.1698	0.6391
Total protein-bound AAs	SAMS4	0.1432	0.6931
Total protein-bound AAs	SAMSs	0.0567	0.8763
Total protein-bound AAs	TD1	-0.1227	0.7356
<b>Total protein-bound AAs</b>	<b>TD1/BCAT1</b>	<b>-0.5280</b>	<b>0.1167</b>
Total protein-bound AAs	THA1	0.3264	0.3573
Total protein-bound AAs	THA2	-0.2071	0.5660
Total protein-bound AAs	THAs	-0.2057	0.5687
Total protein-bound AAs	THAs+TD1	-0.1497	0.6798
<b>Total protein-bound AAs</b>	<b>Thr-sensitive AK activity</b>	<b>0.6575</b>	<b>0.0388</b>
<b>Total protein-bound AAs</b>	<b>Total free AAs</b>	<b>-0.4911</b>	<b>0.1494</b>
Total protein-bound AAs	TS1	0.2612	0.4661
<b>Total protein-bound AAs</b>	<b>TS1/(THAs+TD1)</b>	<b>0.4909</b>	<b>0.1497</b>
Total protein-bound AAs	TS1/TD1	0.3054	0.3909
Total protein-bound AAs	TS1/THAs	0.1358	0.7083
TS1	AK1	-0.2479	0.4899
TS1	AK2	0.0905	0.8037
TS1	AK3	0.1299	0.7206
<b>TS1</b>	<b>AK-HSDH1</b>	<b>0.5200</b>	<b>0.1234</b>
<b>TS1</b>	<b>AK-HSDH2</b>	<b>0.4521</b>	<b>0.1896</b>
<b>TS1</b>	<b>CGS1</b>	<b>0.6356</b>	<b>0.0482</b>
<b>TS1</b>	<b>DHDPS1</b>	<b>0.4429</b>	<b>0.1998</b>
<b>TS1</b>	<b>DHDPS2</b>	<b>0.7143</b>	<b>0.0203</b>
TS1/(THAs+TD1)	(AK-HSDHs+CGS1)/SAMSs	0.2838	0.4268
TS1/(THAs+TD1)	(AKs+AK-HSDHs)/AK-HSDHs	-0.2952	0.4077
TS1/(THAs+TD1)	(AKs+AK-HSDHs+CGS1)/SAMSs	-0.0775	0.8315
TS1/(THAs+TD1)	(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI	0.3367	0.3414
TS1/(THAs+TD1)	(AKs+DHDPSs)/LKR-SDHI	0.2941	0.4095
TS1/(THAs+TD1)	AK1	0.2572	0.4732
TS1/(THAs+TD1)	AK1+AK2	-0.1075	0.7676
TS1/(THAs+TD1)	AK1+AK3	0.0102	0.9777
TS1/(THAs+TD1)	AK2	-0.1581	0.6626
TS1/(THAs+TD1)	AK2+AK3	-0.2013	0.5771
TS1/(THAs+TD1)	AK3	-0.2845	0.4256
<b>TS1/(THAs+TD1)</b>	<b>AK-HSDH1</b>	<b>0.4957</b>	<b>0.1451</b>
TS1/(THAs+TD1)	AK-HSDH2	-0.1930	0.5932
TS1/(THAs+TD1)	AK-HSDHs	0.1536	0.6719
TS1/(THAs+TD1)	AK-HSDHs+CGS1	-0.0061	0.9867
TS1/(THAs+TD1)	AK-HSDHs+TS1	-0.0015	0.9968
TS1/(THAs+TD1)	AK-HSDHs+TS1+TD1	-0.0683	0.8513
TS1/(THAs+TD1)	AK-HSDHs+TS1+THAs	-0.0046	0.9900
TS1/(THAs+TD1)	AKs	-0.1571	0.6648
TS1/(THAs+TD1)	AKs/AK-HSDHs	-0.2952	0.4077
TS1/(THAs+TD1)	AKs+AK-HSDHs	-0.1242	0.7324
TS1/(THAs+TD1)	AKs+AK-HSDHs+CGS1	-0.1565	0.6658
TS1/(THAs+TD1)	AKs+AK-HSDHs+DHDPSs	-0.1431	0.6933
TS1/(THAs+TD1)	AKs+AK-HSDHs+TS1	-0.1288	0.7228
TS1/(THAs+TD1)	AKs+AK-HSDHs+TS1+TD1	-0.1688	0.6411
TS1/(THAs+TD1)	AKs+AK-HSDHs+TS1+THAs	-0.1302	0.7199
TS1/(THAs+TD1)	AKs+DHDPSs	-0.1773	0.6240
<b>TS1/(THAs+TD1)</b>	<b>BCAT1</b>	<b>0.8581</b>	<b>0.0015</b>
TS1/(THAs+TD1)	Biosynthetic genes analyzed	-0.1611	0.6565
TS1/(THAs+TD1)	Catabolic genes analyzed	-0.2229	0.5359
TS1/(THAs+TD1)	CGS1	-0.1796	0.6195
TS1/(THAs+TD1)	CGS1/SAMSs	0.0103	0.9775
<b>TS1/(THAs+TD1)</b>	<b>DHDPS1</b>	<b>-0.5005</b>	<b>0.1407</b>
TS1/(THAs+TD1)	DHDPS2	-0.3170	0.3721

<i>TS1/(THAs+TD1)</i>	<i>DHDPSs</i>	<b>-0.5288</b>	<b>0.1161</b>
<i>TS1/(THAs+TD1)</i>	<i>DHDPSs/LKR-SDHI</i>	0.0392	0.9143
<i>TS1/(THAs+TD1)</i>	<i>LKR-SDHI</i>	-0.2442	0.4966
<b><i>TS1/(THAs+TD1)</i></b>	<b><i>SAMS1</i></b>	<b>-0.8267</b>	<b>0.0032</b>
<b><i>TS1/(THAs+TD1)</i></b>	<b><i>SAMS2</i></b>	<b>-0.6527</b>	<b>0.0408</b>
<i>TS1/(THAs+TD1)</i>	<i>SAMS3</i>	0.1751	0.6284
<i>TS1/(THAs+TD1)</i>	<i>SAMS4</i>	-0.2376	0.5086
<i>TS1/(THAs+TD1)</i>	<i>SAMSs</i>	-0.2217	0.5381
<b><i>TS1/(THAs+TD1)</i></b>	<b><i>TD1</i></b>	<b>-0.6912</b>	<b>0.0268</b>
<i>TS1/(THAs+TD1)</i>	<i>THA1</i>	0.1206	0.7400
<i>TS1/(THAs+TD1)</i>	<i>THA2</i>	-0.2076	0.5650
<i>TS1/(THAs+TD1)</i>	<i>THAs</i>	-0.2229	0.5358
<b><i>TS1/(THAs+TD1)</i></b>	<b><i>THAs+TD1</i></b>	<b>-0.7041</b>	<b>0.0230</b>
<i>TS1/(THAs+TD1)</i>	<i>TS1</i>	-0.0671	0.8539
<b><i>TS1/(THAs+TD1)</i></b>	<b><i>TS1/TD1</i></b>	<b>0.9369</b>	<b>&lt;.0001</b>
<i>TS1/(THAs+TD1)</i>	<i>TS1/THAs</i>	-0.2056	0.5688
<i>TS1/TD1</i>	<i>(AK-HSDHs+CGS1)/SAMSs</i>	0.3531	0.3170
<i>TS1/TD1</i>	<i>(AKs+AK-HSDHs)/AK-HSDHs</i>	-0.2201	0.5411
<i>TS1/TD1</i>	<i>(AKs+AK-HSDHs+CGS1)/SAMSs</i>	0.0046	0.9900
<b><i>TS1/TD1</i></b>	<b><i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i></b>	<b>0.4533</b>	<b>0.1883</b>
<b><i>TS1/TD1</i></b>	<b><i>(AKs+DHDPSs)/LKR-SDHI</i></b>	<b>0.4130</b>	<b>0.2355</b>
<i>TS1/TD1</i>	<i>AK1</i>	0.2782	0.4364
<i>TS1/TD1</i>	<i>AK1+AK2</i>	-0.0624	0.8640
<i>TS1/TD1</i>	<i>AK1+AK3</i>	0.1667	0.6453
<i>TS1/TD1</i>	<i>AK2</i>	-0.1186	0.7441
<i>TS1/TD1</i>	<i>AK2+AK3</i>	-0.1327	0.7148
<i>TS1/TD1</i>	<i>AK3</i>	-0.1112	0.7598
<b><i>TS1/TD1</i></b>	<b><i>AK-HSDHI</i></b>	<b>0.4384</b>	<b>0.2050</b>
<i>TS1/TD1</i>	<i>AK-HSDH2</i>	-0.0919	0.8007
<i>TS1/TD1</i>	<i>AK-HSDHs</i>	0.1861	0.6066
<i>TS1/TD1</i>	<i>AK-HSDHs+CGS1</i>	0.0099	0.9784
<i>TS1/TD1</i>	<i>AK-HSDHs+TS1</i>	-0.1127	0.7566
<i>TS1/TD1</i>	<i>AK-HSDHs+TS1+TD1</i>	-0.1761	0.6265
<i>TS1/TD1</i>	<i>AK-HSDHs+TS1+THAs</i>	-0.1171	0.7473
<i>TS1/TD1</i>	<i>AKs</i>	-0.0811	0.8237
<i>TS1/TD1</i>	<i>AKs/AK-HSDHs</i>	-0.2201	0.5411
<i>TS1/TD1</i>	<i>AKs+AK-HSDHs</i>	-0.0363	0.9206
<i>TS1/TD1</i>	<i>AKs+AK-HSDHs+CGS1</i>	-0.0754	0.8359
<i>TS1/TD1</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.0600	0.8692
<i>TS1/TD1</i>	<i>AKs+AK-HSDHs+TS1</i>	-0.1358	0.7083
<i>TS1/TD1</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	-0.1779	0.6230
<i>TS1/TD1</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	-0.1375	0.7047
<i>TS1/TD1</i>	<i>AKs+DHDPSs</i>	-0.1056	0.7715
<b><i>TS1/TD1</i></b>	<b><i>BCAT1</i></b>	<b>0.8040</b>	<b>0.0051</b>
<i>TS1/TD1</i>	Biosynthetic genes analyzed	-0.1716	0.6356
<i>TS1/TD1</i>	Catabolic genes analyzed	-0.2176	0.5459
<i>TS1/TD1</i>	<i>CGS1</i>	-0.1852	0.6084
<i>TS1/TD1</i>	<i>CGS1/SAMSs</i>	0.0399	0.9128
<b><i>TS1/TD1</i></b>	<b><i>DHDPS1</i></b>	<b>-0.6112</b>	<b>0.0605</b>
<i>TS1/TD1</i>	<i>DHDPS2</i>	-0.3746	0.2862
<b><i>TS1/TD1</i></b>	<b><i>DHDPSs</i></b>	<b>-0.6302</b>	<b>0.0508</b>
<i>TS1/TD1</i>	<i>DHDPSs/LKR-SDHI</i>	0.0421	0.9080
<i>TS1/TD1</i>	<i>LKR-SDHI</i>	-0.3073	0.3878
<b><i>TS1/TD1</i></b>	<b><i>SAMS1</i></b>	<b>-0.8175</b>	<b>0.0039</b>
<b><i>TS1/TD1</i></b>	<b><i>SAMS2</i></b>	<b>-0.7313</b>	<b>0.0162</b>
<i>TS1/TD1</i>	<i>SAMS3</i>	0.1868	0.6053
<i>TS1/TD1</i>	<i>SAMS4</i>	-0.2550	0.4771

<i>TS1/TD1</i>	<i>SAMSs</i>	-0.2152	0.5505
<b><i>TS1/TD1</i></b>	<b><i>TD1</i></b>	<b>-0.7315</b>	<b>0.0162</b>
<i>TS1/TD1</i>	<i>THA1</i>	0.0273	0.9403
<i>TS1/TD1</i>	<i>THA2</i>	-0.2309	0.5209
<i>TS1/TD1</i>	<i>THAs</i>	-0.2618	0.4650
<b><i>TS1/TD1</i></b>	<b><i>THAs+TD1</i></b>	<b>-0.7533</b>	<b>0.0119</b>
<i>TS1/TD1</i>	<i>TS1</i>	-0.2282	0.5259
<b><i>TS1/THAs</i></b>	<b><i>(AK-HSDHs+CGS1)/SAMSs</i></b>	<b>-0.6274</b>	<b>0.0521</b>
<b><i>TS1/THAs</i></b>	<b><i>(AKs+AK-HSDHs)/AK-HSDHs</i></b>	<b>-0.7343</b>	<b>0.0156</b>
<b><i>TS1/THAs</i></b>	<b><i>(AKs+AK-HSDHs+CGS1)/SAMSs</i></b>	<b>-0.6867</b>	<b>0.0283</b>
<i>TS1/THAs</i>	<i>(AKs+AK-HSDHs+DHDPSs)/LKR-SDHI</i>	0.1736	0.6316
<i>TS1/THAs</i>	<i>(AKs+DHDPSs)/LKR-SDHI</i>	-0.0326	0.9287
<i>TS1/THAs</i>	<i>AK1</i>	0.3162	0.3734
<b><i>TS1/THAs</i></b>	<b><i>AK1+AK2</i></b>	<b>-0.4512</b>	<b>0.1906</b>
<b><i>TS1/THAs</i></b>	<b><i>AK1+AK3</i></b>	<b>0.4189</b>	<b>0.2282</b>
<b><i>TS1/THAs</i></b>	<b><i>AK2</i></b>	<b>-0.5004</b>	<b>0.1407</b>
<b><i>TS1/THAs</i></b>	<b><i>AK2+AK3</i></b>	<b>-0.4576</b>	<b>0.1836</b>
<i>TS1/THAs</i>	<i>AK3</i>	0.1593	0.6602
<b><i>TS1/THAs</i></b>	<b><i>AK-HSDH1</i></b>	<b>0.6001</b>	<b>0.0666</b>
<b><i>TS1/THAs</i></b>	<b><i>AK-HSDH2</i></b>	<b>0.6773</b>	<b>0.0314</b>
<b><i>TS1/THAs</i></b>	<b><i>AK-HSDHs</i></b>	<b>0.7782</b>	<b>0.0080</b>
<b><i>TS1/THAs</i></b>	<b><i>AK-HSDHs+CGS1</i></b>	<b>0.5973</b>	<b>0.0682</b>
<b><i>TS1/THAs</i></b>	<b><i>AK-HSDHs+TS1</i></b>	<b>0.6310</b>	<b>0.0504</b>
<b><i>TS1/THAs</i></b>	<b><i>AK-HSDHs+TS1+TD1</i></b>	<b>0.6506</b>	<b>0.0416</b>
<b><i>TS1/THAs</i></b>	<b><i>AK-HSDHs+TS1+THAs</i></b>	<b>0.6180</b>	<b>0.0569</b>
<b><i>TS1/THAs</i></b>	<b><i>AKs</i></b>	<b>-0.4141</b>	<b>0.2341</b>
<b><i>TS1/THAs</i></b>	<b><i>AKs/AK-HSDHs</i></b>	<b>-0.7343</b>	<b>0.0156</b>
<i>TS1/THAs</i>	<i>AKs+AK-HSDHs</i>	-0.2239	0.5340
<i>TS1/THAs</i>	<i>AKs+AK-HSDHs+CGS1</i>	-0.1471	0.6851
<i>TS1/THAs</i>	<i>AKs+AK-HSDHs+DHDPSs</i>	-0.1941	0.5911
<i>TS1/THAs</i>	<i>AKs+AK-HSDHs+TS1</i>	0.0510	0.8888
<i>TS1/THAs</i>	<i>AKs+AK-HSDHs+TS1+TD1</i>	0.0920	0.8003
<i>TS1/THAs</i>	<i>AKs+AK-HSDHs+TS1+THAs</i>	0.0424	0.9074
<i>TS1/THAs</i>	<i>AKs+DHDPSs</i>	-0.3838	0.2735
<i>TS1/THAs</i>	<i>BCAT1</i>	-0.3605	0.3062
<i>TS1/THAs</i>	Biosynthetic genes analyzed	0.1155	0.7508
<b><i>TS1/THAs</i></b>	<b>Catabolic genes analyzed</b>	<b>0.8527</b>	<b>0.0017</b>
<i>TS1/THAs</i>	<i>CGS1</i>	0.2879	0.4198
<b><i>TS1/THAs</i></b>	<b><i>CGS1/SAMSs</i></b>	<b>-0.8705</b>	<b>0.0010</b>
<i>TS1/THAs</i>	<i>DHDPS1</i>	0.3619	0.3042
<b><i>TS1/THAs</i></b>	<b><i>DHDPS2</i></b>	<b>0.6853</b>	<b>0.0287</b>
<b><i>TS1/THAs</i></b>	<b><i>DHDPSs</i></b>	<b>0.7095</b>	<b>0.0216</b>
<b><i>TS1/THAs</i></b>	<b><i>DHDPSs/LKR-SDHI</i></b>	<b>0.7567</b>	<b>0.0113</b>
<b><i>TS1/THAs</i></b>	<b><i>LKR-SDHI</i></b>	<b>-0.4012</b>	<b>0.2505</b>
<b><i>TS1/THAs</i></b>	<b><i>SAMS1</i></b>	<b>0.5403</b>	<b>0.1069</b>
<b><i>TS1/THAs</i></b>	<b><i>SAMS2</i></b>	<b>0.4464</b>	<b>0.1960</b>
<b><i>TS1/THAs</i></b>	<b><i>SAMS3</i></b>	<b>0.7083</b>	<b>0.0219</b>
<b><i>TS1/THAs</i></b>	<b><i>SAMS4</i></b>	<b>0.7958</b>	<b>0.0059</b>
<b><i>TS1/THAs</i></b>	<b><i>SAMSs</i></b>	<b>0.8530</b>	<b>0.0017</b>
<b><i>TS1/THAs</i></b>	<b><i>TD1</i></b>	<b>0.6777</b>	<b>0.0313</b>
<i>TS1/THAs</i>	<i>THA1</i>	-0.2923	0.4125
<b><i>TS1/THAs</i></b>	<b><i>THA2</i></b>	<b>-0.4954</b>	<b>0.1454</b>
<b><i>TS1/THAs</i></b>	<b><i>THAs</i></b>	<b>-0.5535</b>	<b>0.0970</b>
<b><i>TS1/THAs</i></b>	<b><i>THAs+TD1</i></b>	<b>0.5523</b>	<b>0.0978</b>
<b><i>TS1/THAs</i></b>	<b><i>TS1</i></b>	<b>0.4809</b>	<b>0.1594</b>
<i>TS1/THAs</i>	<i>TS1/TD1</i>	-0.2150	0.5508

**Supplemental Table S6. Primers used in this study**

Primer	Sequence	Use
AK-HSDH2_5'L	5'-TGG TCC TAT TAT TTG CGC CTT C-3'	Amplifying sequencing template
AK-HSDH2_5'R	5'-CGC CTT AAC GCT ATC TTC ACG-3'	Amplifying sequencing template
AK-HSDH2_3'L	5'-TGC TTT GCT GTG CCT GAG AAG-3'	Amplifying sequencing template
AK-HSDH2_3'R	5'-GTA TCT TCG AAG TTC AAC TGT TC-3'	Amplifying sequencing template
SALK_082155LP	5'-TTG GAT GAG CAG CTT AGA ACC-3'	Genotyping
SALK_082155RP	5'-TGT TCC AAC ACA CAA TTC CAG-3'	Genotyping
Exon2_L	5'-CCG AAA GAA AAC TTG TGG TTG TC-3'	Amplifying restriction enzyme digestion substrate
Exon4_R	5'-AGC ACC CAT AAT AGC TGC TG-3'	Amplifying restriction enzyme digestion substrate
SALK_059678LP	5'-ACC CAA ATC AAA GAT ATT GCC-3'	Genotyping
SALK_059678RP	3'-TGA ATC GAA CAG AGT TTG ATG AG-3'	Genotyping
SALK_019023LP	5'-TGC TCC TTT TTA TTA AAT ATC AAA TCG-3'	Genotyping
SALK_019023RP	5'-AAA ACC CTT CTG TTT GTG CAG-3'	Genotyping
WiscDsLox461-464J6LP	5'-AGCCGAGCTAGCTTATTTTGG-3'	Genotyping
WiscDsLox461-464J6RP	5'-TTG CCA AGT CTG GGT TGT ATC-3'	Genotyping
SALK_003685LP	5'-CTC CAA GCT CAT GAG CAG TTC-3'	Genotyping
SALK_003685RP	5'-TTG AAT CTG AAC CGT CCA TTC-3'	Genotyping
SALK_043533LP	5'-TGA GAT CGG GAT TAT CAC CAC-3'	Genotyping
SALK_043533RP	5'-TGA TCA AGC TCC TGT CAC ATG-3'	Genotyping
SALK_125957LP	5'-AGC TGT TCT AGA ATC GGG AGC-3'	Genotyping
SALK_125957RP	5'-TTC CAG TCC AGA ATC TTG TGC-3'	Genotyping
LBa1	5'-TGG TTC ACG TAG TGG GCC ATC G-3'	Genotyping
p745	5'-AAC GTC CGC AAT GTG TTA TTA AGT TGT C-3'	Genotyping
AK1_L	5'-GAA CTG ATT CAA CAG GAG CTT-3'	qRT-PCR
AK1_R	5'-AAA GAA CAT GAA ACG CCC TC-3'	qRT-PCR
AK2_L	5'-CTA TCA GCA ATG GGA AAG AC-3'	qRT-PCR
AK2_R	5'-GAG CAG TTC TTA AAT GGA GTT C-3'	qRT-PCR
AK3_L	5'-ACT CCA TAT AAG GAC TGC TC-3'	qRT-PCR
AK3_R	5'-GCA TTC TCC AAA TGA AAC CA-3'	qRT-PCR
AK-HSDH1_L	5'-AGC AGG AGA AGT CTT GAG AT-3'	qRT-PCR
AK-HSDH1_R	5'-GTT TGG TTG TGA AAG CGA TG-3'	qRT-PCR
AK-HSDH2_L	5'-CTC GTA CCA GAA CCT CTA AA-3'	qRT-PCR
AK-HSDH2_R	5'-CAC CAC TCC AAC ATA TCT CA-3'	qRT-PCR
DHDPS1_L	5'-TGA TCT CCA TTG ATT CTG CC-3'	qRT-PCR
DHDPS1_R	5'-CAT AGG AAG ATG GAA GTT AGG T-3'	qRT-PCR
DHDPS2_L	5'-GGT TAT GGC TTG TGT TCT ATG-3'	qRT-PCR
DHDPS2_R	5'-GCA TTG GGA GAT GGA AAT TG-3'	qRT-PCR
CGS1_L	5'-CAA CAG AAT TCG ACC GCT TT-3'	qRT-PCR
CGS1_R	5'-AAA CTG ACC ACA CCT CCA AA-3'	qRT-PCR
TS1_L	5'-GTA TTG TAG AAG AAG CCA CAG-3'	qRT-PCR
TS1_R	5'-TTG ATT CCT CAG CTT GAA CA-3'	qRT-PCR
TD1_L	5'-GCA ACC TGT ATT CTC GTT TAA G-3'	qRT-PCR
TD1_R	5'-TAG CAG ATA AAG CAA CTC CT-3'	qRT-PCR
LKR-SDH_L	5'-AAC CAT TTC GTC ACA GCA AT-3'	qRT-PCR
LKR-SDH_R	5'-GAA ATA CCT TCA ACC GTC TCT T-3'	qRT-PCR
SAMS1_L	5'-GAG CCA TTG TCT GTC TTT GT-3'	qRT-PCR
SAMS1_R	5'-TCA AGA ACC TTC CGT TTC CT-3'	qRT-PCR
SAMS2_L	5'-TCA AAC CAA TCA TCC CAG AGA A-3'	qRT-PCR
SAMS2_R	5'-CCA TCC TCC GTA TGT GTC AA-3'	qRT-PCR
SAMS3_L	5'-CTG AGC CAT TGT CTG TGT TC-3'	qRT-PCR
SAMS3_R	5'-AAC CTA CCA TTA CCT CCT CTC-3'	qRT-PCR
SAMS4_L	5'-GCT ATG ATT CCG ATT AGA GTC C-3'	qRT-PCR
SAMS4_R	5'-AAG ATG GTG TTA TCG TCA AGG T-3'	qRT-PCR
THA1_L	5'-TCA AGA ATG AAG AAG ACG GG-3'	qRT-PCR
THA1_R	5'-TAT TCC ACG CTC AAA CAT CT-3'	qRT-PCR
THA2_L	5'-GAT TGG TGC TAT TGA AGC TG-3'	qRT-PCR
THA2_R	5'-CTT GGC TAA TTC TCC GAC TT-3'	qRT-PCR
BCAT1_L	5'-TGT ATC TCA GAC CGT TGT TG-3'	qRT-PCR
BCAT1_R	5'-GAA TCA CCT CCT CCA CAT AC-3'	qRT-PCR