

1) Naming Inconsistencies

2-Oxoglutarate + L-Alanine $\rightleftharpoons$ Pyruvate + L-Glutamate

KEGG
BRENDA
Escherichia coli iAF1260
Acinetobacter baylyi iAbaylyi
Leishmania major iAC560
Mannheimia succiniciproducens

C00026 + C00041 $\rightleftharpoons$ C00022 + C00025
 α -ketoglutarate + L-alanine $\rightleftharpoons$ L-glutamate + pyruvate
[c] : [akg](#) + ala-L $\rightarrow$ glu-L + pyr
1 GLT + 1 PYRUVATE $\rightleftharpoons$ 1 [2-KETOGLUTARATE](#) + 1 L-ALPHA-ALANINE
[m] : [akg](#) + ala-L $\rightarrow$ glu-L + pyr
PYR + GLU $\rightarrow$ [AKG](#) + ALA

2) Elemental and charge imbalances

Balanced

KEGG
Escherichia coli iAF1260

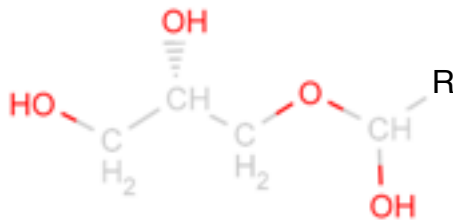
(R)-Lactate + NAD $^{+}$ $\rightleftharpoons$ Pyruvate + NADH + H $^{+}$
[c] : lac-D + nad $\rightarrow$ h + nadh + pyr

Unbalanced

Acinetobacter baylyi iAbaylyi

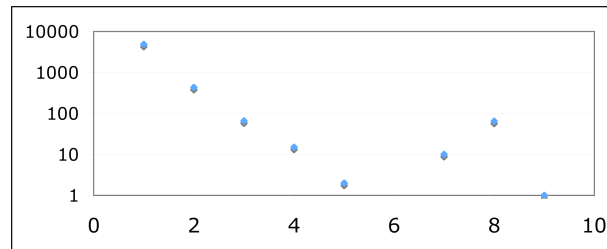
1 D-LACTATE + 1 NAD $\rightleftharpoons$ 1 NADH + 1 PYRUVATE

3) Errors/incompleteness/ambiguity in structural information

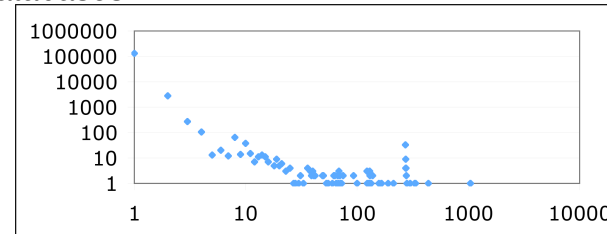


metabolites

models



databases



structures