

Reaction Name	Reaction Formula
ENO	'2pg[c] <=> h2o[c] + pep[c] '
FBA	'fdp[c] <=> dhap[c] + g3p[c] '
GAPD	'g3p[c] + nad[c] + pi[c] <=> 13dpg[c] + h[c] + nadh[c] '
HEX1	'atp[c] + glc_D[c] -> adp[c] + g6p[c] + h[c] '
LDH_L	'lac_L[c] + nad[c] <=> h[c] + nadh[c] + pyr[c] '
PDHm	'coa[m] + nad[m] + pyr[m] -> accoa[m] + co2[m] + nadh[m] '
PFK	'atp[c] + f6p[c] -> adp[c] + fdp[c] + h[c] '
PGI	'g6p[c] <=> f6p[c] '
PGK	'3pg[c] + atp[c] <=> 13dpg[c] + adp[c] '
PGM	'2pg[c] <=> 3pg[c] '
PYK	'adp[c] + h[c] + pep[c] -> atp[c] + pyr[c] '
TPI	'dhap[c] <=> g3p[c] '
PPA	'h2o[c] + ppi[c] -> h[c] + 2 pi[c] '
ATPS4m	'adp[m] + pi[m] + 4 h[i] -> atp[m] + h2o[m] + 3 h[m] '
CYOR_u10m	'2 ficytC[m] + 2 h[m] + q10h2[m] -> 2 focytC[m] + q10[m] + 4 h[i] '
NADH2_u10m	'5 h[m] + nadh[m] + q10[m] -> nad[m] + q10h2[m] + 4 h[i] '
CYOOm3	'4 focytC[m] + 8 h[m] + o2[m] -> 4 ficytC[m] + 2 h2o[m] + 4 h[i] '
ACITL	'atp[c] + cit[c] + coa[c] -> accoa[c] + adp[c] + oaa[c] + pi[c] '
ACONTm	'cit[m] <=> icit[m] '
AKGDm	'akg[m] + coa[m] + nad[m] -> co2[m] + nadh[m] + succoa[m] '
CSm	'accoa[m] + h2o[m] + oaa[m] -> cit[m] + coa[m] + h[m] '
FUMm	'fum[m] + h2o[m] <=> mal_L[m] '
ICDHxm	'icit[m] + nad[m] -> akg[m] + co2[m] + nadh[m] '
MDH	'mal_L[c] + nad[c] <=> h[c] + nadh[c] + oaa[c] '
MDHm	'mal_L[m] + nad[m] <=> h[m] + nadh[m] + oaa[m] '
SUCD1m	'fad[m] + succ[m] <=> fadh2[m] + fum[m] '
SUCOASm	'atp[m] + coa[m] + succ[m] <=> adp[m] + pi[m] + succoa[m] '
G6PDH2r	'g6p[c] + nadp[c] <=> 6pgl[c] + h[c] + nadph[c] '
PGL	'6pgl[c] + h2o[c] -> 6pgc[c] + h[c] '
PRPPS	'atp[c] + r5p[c] -> amp[c] + h[c] + prpp[c] '
RPE	'ru5p_D[c] <=> xu5p_D[c] '
RPI	'r5p[c] <=> ru5p_D[c] '
TALA	'g3p[c] + s7p[c] <=> e4p[c] + f6p[c] '
TKT1	'r5p[c] + xu5p_D[c] <=> g3p[c] + s7p[c] '
TKT2	'e4p[c] + xu5p_D[c] <=> f6p[c] + g3p[c] '
GNDc	'6pgc[c] + nadp[c] -> co2[c] + nadph[c] + ru5p_D[c] '
EX_glc(e)	'glc_D[e] <=> '
EX_gln_L(e)	'gln_L[e] <=> '