

## Reactions contained in the reduced version of the iSM454 model

The reduced version of the iSM454 model includes the following reactions from the original file:

'\_2PGADEHYDRAT\_RXN'  
'PHOSACETYLTRANS\_RXN'  
'ACETATEKIN\_RXN'  
'PEPDEPHOS\_RXN'  
'GLUCOKIN\_RXN'  
'PHOSGLYPHOS\_RXN'  
'PGLUCISOM\_RXN'  
'GAPOXNPHOSPHN\_RXN'  
'\_3PGAREARR\_RXN'  
'GLU6PDEHYDROG\_RXN'  
'PHOSPHOKETOLASE\_RXN'  
'RXN66\_3'  
'ALCOHOL\_DEHYDROG\_RXN'  
'DLACTDEHYDROGNADR\_XN'  
'ACETALD\_DEHYDROG\_RXN'  
'\_6PGLUCONOLACT\_RXN'  
'ALDOSE\_1\_EPIMERASE\_RXN'  
'RXN\_9952'  
'ACETOLACTSYN\_RXN'  
'ACETOLACTATE\_DECARBOXYLASE\_RXN'  
'RXN\_11036'  
'RR\_BUTANEDIOL\_DEHYDROGENASE\_RXN'  
'RXN\_6081'  
'CITLY\_RXN'  
'OXALODECARB\_RXN'  
'Mannitol\_RXN'  
'ERITHRITOL\_RXN'  
'PHOSPHOKETOLASE2\_RXN'  
'\_1\_2\_3\_3\_RXN'  
'MALATE\_DEH\_RXN'  
'FUMHYDR\_RXN'  
'PYRUVDEH\_RXN'  
'RXNK9E\_163'  
'TRANSALDOL-R\_XN'  
'PRPPSYN\_RXN'  
'RIBULP3EPIM\_RXN'  
'\_1TRANSKETO\_RXN'  
'RIB5PISOM\_RXN'  
'b\_D\_fructose\_ex\_'  
'a\_D\_glucose\_ex\_'  
'D\_mannitol\_ex\_'  
'citrate\_ex\_'  
'\_R\_lactate\_ex\_'  
'\_S\_lactate\_ex\_'  
'\_S\_malate\_ex\_'  
'butanediol\_ex\_'

'diacetyl\_ex\_'  
'ethanol\_ex\_'  
'ammonium\_ex\_'  
'acetate\_ex\_'  
'erythritol\_ex\_'  
'CO2\_ex\_'  
'oxygen\_ex\_'  
'LCYSDDESULF\_RXN'  
'CYSTATHIONINE\_BETA\_LYASE\_RXN'  
'METHYL\_GLYOXAL\_DEHYDROG\_RXN'  
'growth\_rate'  
'TRANS\_ERITHRITOL\_RXN'  
'TRANS\_RXNK9E\_520'  
'TRANS\_RXNK9E\_529'  
'TRANS\_RXNK9E\_539'  
'TRANS\_RXNK9E\_540'  
'TRANS\_RXNK9E\_542'  
'TRANS\_RXNK9E\_541'  
'TRANS\_RXNK9E\_463'  
'TRANS\_RXNK9E\_524'  
'TRANSRXNK9E525'  
'TRANS\_RXNK9E\_434'  
'TRANS\_RXNK9E\_354'  
'TRANS\_RXNK9E\_535'  
'TRANS\_RXNK9E\_531'  
'TRANS\_RXNK9E\_533'  
'TRANS\_RXNK9E\_530'  
'TRANS\_RXNK9E\_431'  
'L\_Cys\_ex\_'  
'TRANS\_RXNK9E\_474'  
'TRANS\_RXNK9E\_492'  
'L\_Ser\_ex\_'  
'TRANS\_RXNK9E\_481'  
'TRANS\_RXNK9E\_500'  
'L\_Thr\_ex\_'  
'TRANS\_RXNK9E\_482'  
'TRANS\_RXNK9E\_490'  
'H2S\_transport'  
'H2S\_exchange'  
'water\_ex\_'  
'TRANS\_RXNK9E\_519'  
'ammonium\_ex\_'  
'TRANS\_RXNK9E\_415'  
'ATPSYN\_RXN'  
'RXNK9E\_225'  
'CYSTATHIONINE\_BETA\_SYNTHASE\_RXN'  
'AMACETOXID\_RXN'  
'THREOSPON\_RXN'  
'THREODEHYD\_RXN'  
'b\_D\_glucose\_ex\_'  
'TRANS\_RXNK9E\_536'

'TRANS\_RXNK9E\_534'  
'H\_ex'