



'minval' Package

An R Package for MINimal VALidation of stoichiometric reactions

Daniel Osorio, Janneth Gonzalez and Andres Pinzón-Velasco.

Language: R

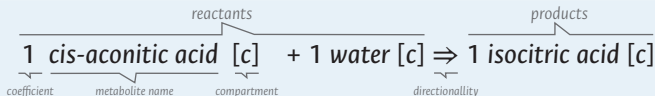
Stable: CRAN

Development: gibbslab/minval

License: GPL-2

Binaries: Windows - Linux - Mac

ENZYME



$h2o[r] + dheas[r] \Rightarrow h[r] + dhea[r] + so4[r]$
 $uri[e] \Leftrightarrow uri[c]$
 $na1[e] + uri[e] \Rightarrow na1[c] + uri[c]$
 $atp[c] + pi[m] \Rightarrow pi[c] + atp[m]$
 $na1[e] + gchola[e] \Rightarrow na1[c] + gchola[c]$
 ...

REACTIONS

getChEBI()
 CHEBI DATABASE
 DOWNLOAD

isValidSyntax()
 SYNTAX VALIDATION

isBalanced()
 MASS-CHARGE
 BALANCE

stoichiometricMatrix()
 GENERATE THE
 STOICHIOMETRIC
 MATRIX

metabolites()
 EXTRACT
 METABOLITES

products()
 EXTRACT
 PRODUCTS

reactants()
 EXTRACT
 REACTANTS

compartments()
 EXTRACT
 COMPARTMENTS

orphanReactants()
 reactants(reactions) @ products(reactions)

orphanProducts()
 products(reactions) @ reactants(reactions)

ORPHANS

convert2SBML() | writeTSVmod()

SBML
 Systems Biology
 Standard File

model.xml

TSV
 'sybil' R Package
 Standard File

model_*.tsv

FILES