C. ljungdahlii Draft Models

Genome Sequence
Size 4.6 Mb
Genes 4184

SimPheny AutoModel
Genes 554
Metabolites 808
Reactions 661

Model SEED
Genes 842
Metabolites 1044
Reactions 1085

Published Clostridium models
C. acetobutylicum C. thermocellum

Lee et al Senger et al
Homologs to C. ljungdahlii
183 genes 196 genes 76 genes

Reconciliation of different models
List of Agreements
List of Discrepancies

Manual Curation of content
KEGG and other databases
Bibliomic data
Reconstruct key pathways
Wood Ljungdahl pathway
Energy conserving pathways

Curated C. ljungdahlii reconstruction

Functional metabolic model of C. ljungdahlii
Genes 637
Metabolites 698
Reactions 785

Biomass Objective Function
Gap Analysis
Phenotypic growth screens.