

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Thermodynamic data for Recon 2 and Recon 3D. Gibbs free energy of formation for the compounds, computed with the group contribution method.

File Name: Supplementary Data 2

Description: Subnetworks to connect the extracellular medium in Recon 2 and Recon 3D. Subnetworks generated with redGEMX to connect the metabolites from the extracellular medium to the core network.

File Name: Supplementary Data 3

Description: Lumped reactions for the synthesis of biomass building blocks for Recon 2 and Recon 3D. Overall lumped reactions generated with lumpGEM to biosynthesize the biomass building blocks.