Title: Glutathione metabolism **Last modified:** 10/16/2013 Organism: Homo sapiens Amino acid metabolism 2.3.2.4 L-Amino acid 5-Oxoproline OPLAH L-Glutamate **◄--** Glutamate metabolism 2.3.2.4 **Cysteine metabolism** Taurine and hypotaurine metabolism L-Cysteine GCLC (5-L-Glutamyl)-L-amino acid GCLM ANPEP Glycine GGTLA1 Cysteinyl-glycine GGT1 3.4.11.4 g-Glutamyl Cyanoamino acid metabolism GGT1 Cycle GGTLA1 glutathione recycling Oxidized glutathione GSR GSS Glutathione (reduced) 🤜 g-L-Glutamyl-L-cysteine 1.8.1.13 Bis-g-glutamylcystine Glutathione utilization NADPH NADP+ IDH1 GSTA5 1.1.1.43 L-Glutamate GSTA1 G6PD RX GSTT2 Glycine GSTT1 GGT1 R-S-Alanylglycine R-S-Glutathione Acetyl-CoA GSTM1 GGTLA1 ANPEP GSTM2 R-S-Alanine 1.5.4.1 1.8.4.3 GPX2 1.8.4.2 1.8.5.1 GPX1 2.3.1.80 1.8.4.7 2.8.1.3 GPX4 R-S-Mercapturonate 1.8.4.1 GPX3 1.11.1.12 Glutamylcysteinyl-glycylspermidine 6.3.1.8 1.8.3.3 1.8.4.4 **Glutathione utilization** 3.5.1.78