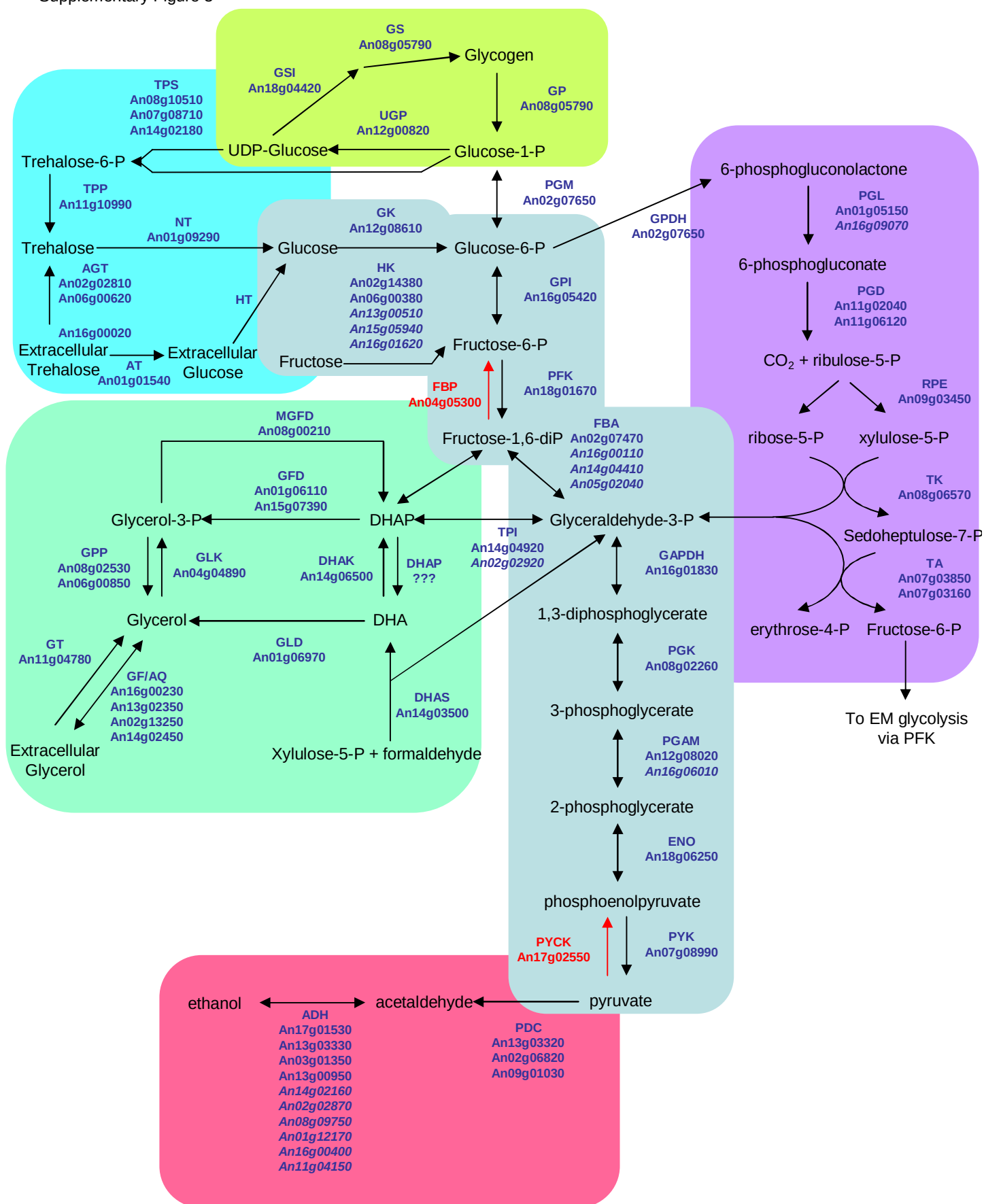


Supplementary Figure 3



Supplementary Figure 3 Central metabolism. Glycolysis, hexose monophosphate pathway and glycogen, trehalose and glycerol metabolism in *A. niger*. Gene products contributing to these pathways are indicated. An numbers in *italics* are for proteins that show significant homology to the established enzyme in the pathway but are not necessarily performing the same reaction. GLYCOLYSIS: GK, glucokinase; HK, hexokinase; PGM, phosphoglucomutase; GPI, Glucose-6-phosphate isomerase; PFK, 6-phosphofructokinase; FBA, Fructose-biphosphate aldolase; TPI, Triose-phosphate isomerase; GAPDH, Glyceraldehyde-3-phosphate dehydrogenase; PGK, Phosphoglycerate kinase; PGAM, Phosphoglycerate mutase; ENO, enolase; PYK, pyruvate kinase. HEXOSE MONOPHOSPHATE PATHWAY: GPDH, Glucose-6-phosphate 1-dehydrogenase; PGL, 6-phosphogluconolactonase; PGD, 6-phosphogluconate dehydrogenase; RPE, Ribulose-5-phosphate 3-epimerase; TK, Transketolase; TA, Transaldolase. GLUCONEOGENESIS: PYCK, Phosphoenolpyruvate carboxykinase; FBP, Fructose-bisphosphatase. ETHANOL PATHWAY: PDC, pyruvate decarboxylase; ADH, alcohol dehydrogenase. GLYCOGEN METABOLISM: GSI, glycogen synthesis initiator; GS, Glycogen synthase; UGP, UDP-glucose pyrophosphorylase; GP, Glycogen phosphorylase. TREHALOSE METABOLISM: TPS, Trehalose 6-phosphate synthase; TPP, Trehalose 6-phosphate phosphatase; NT, neutral trehalase; AT, acid trehalase; AGT, trehalose transporter. GLYCEROL METABOLISM: GFD, Glycerol 3-phosphate dehydrogenase; GPP, Glycerol 3-phosphate phosphatase; DHAP, Dihydroxy acetone phosphate phosphatase; GLD, Glycerol dehydrogenase; DHAK, dihydroxyacetone kinase; GLK, glycerol kinase; GT, glycerol transporter; GF/AQ, glycerol facilitator/aquaporin; DHAS, dihydroxyacetone synthase; MGFD, mitochondrial glycerol 3-phosphate dehydrogenase.