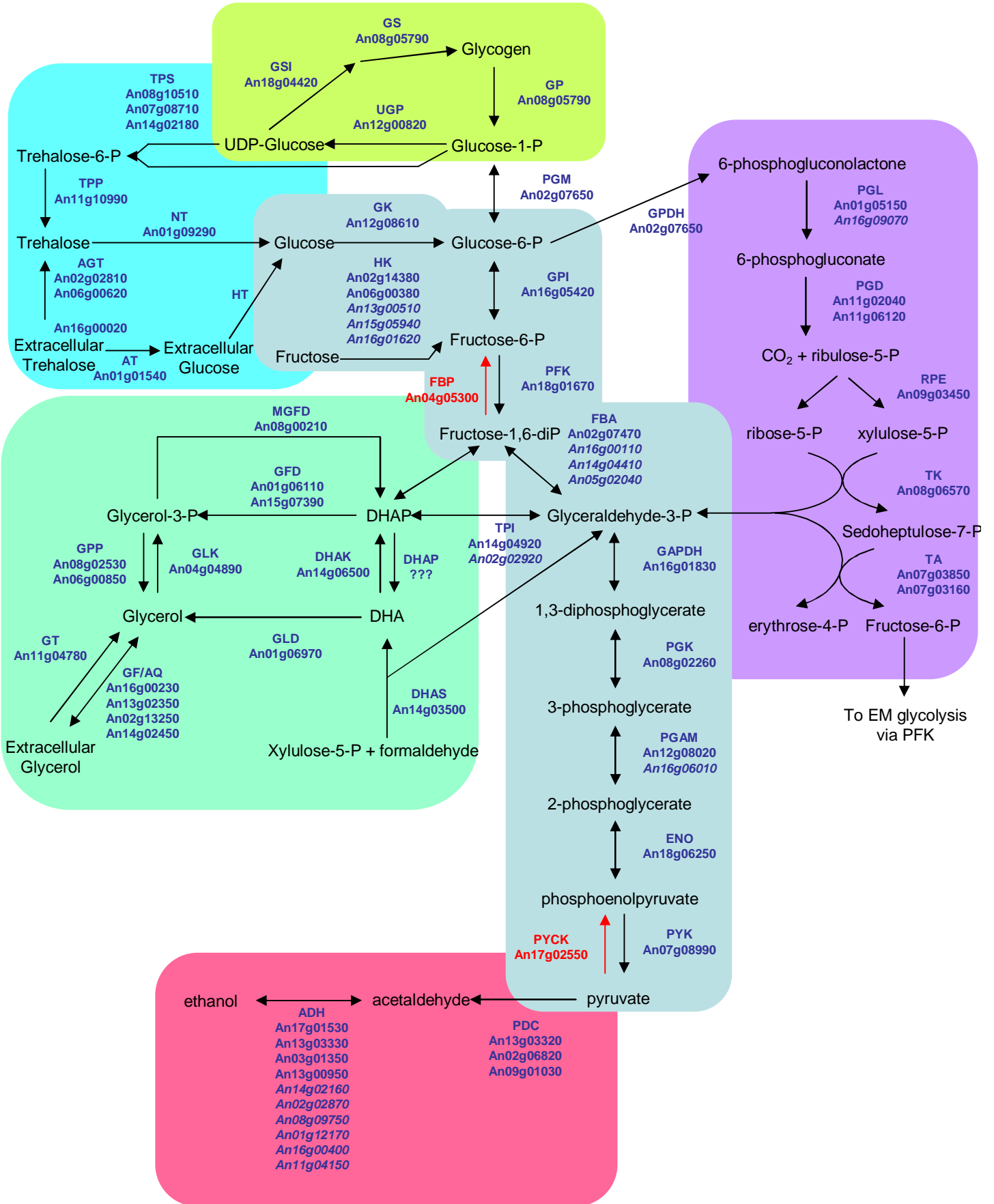


Supplementary Figure 3



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; MGF, mitochondrial glycerol 3-phosphate dehydrogenase.