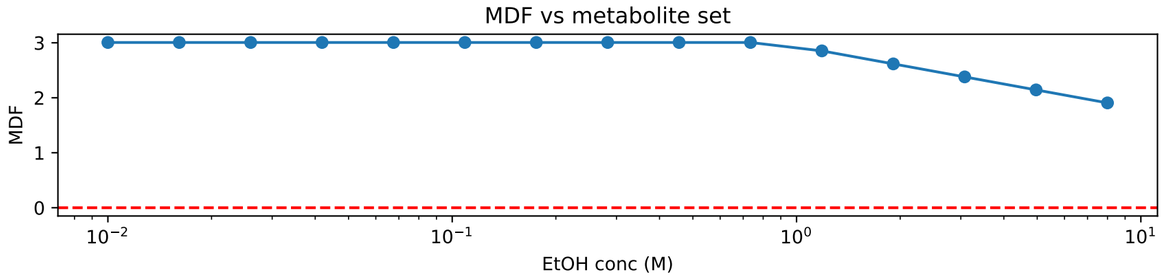
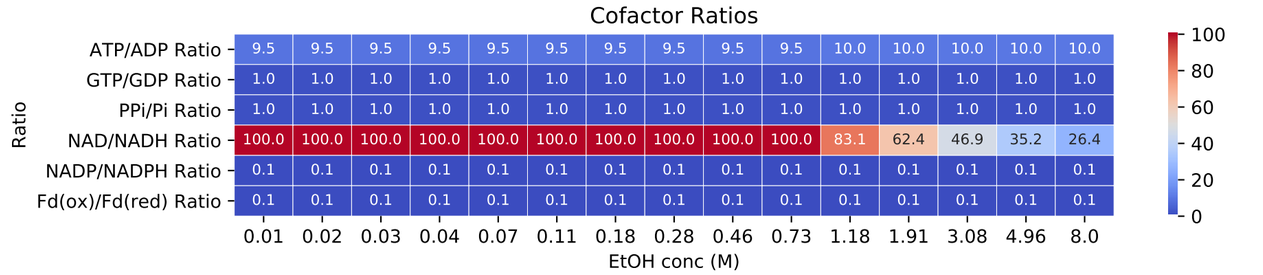
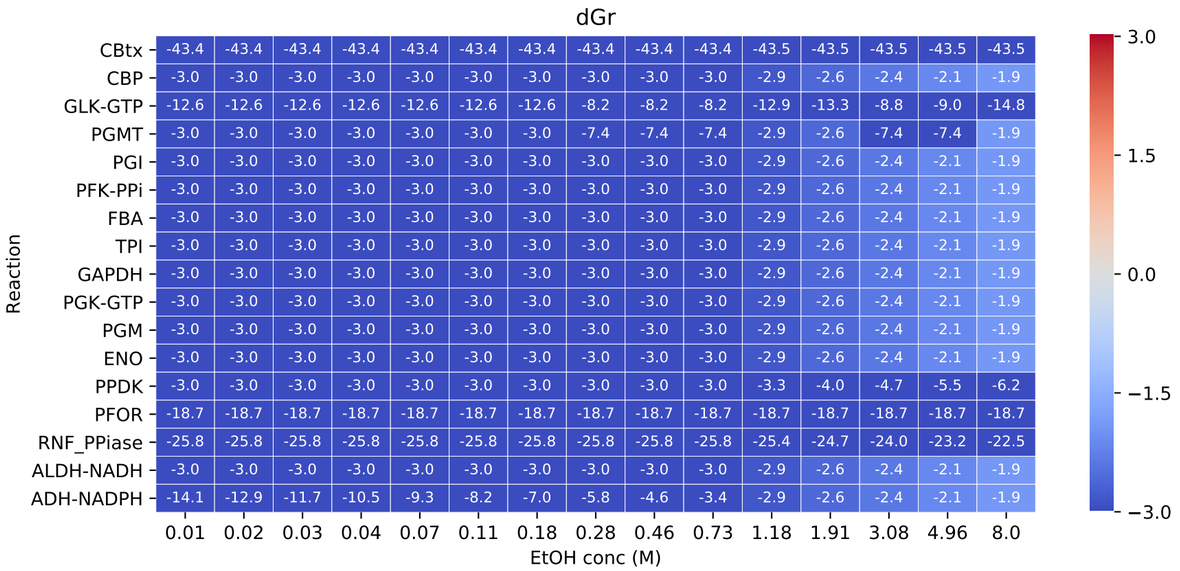
Analysis of flux set: adh-ndp

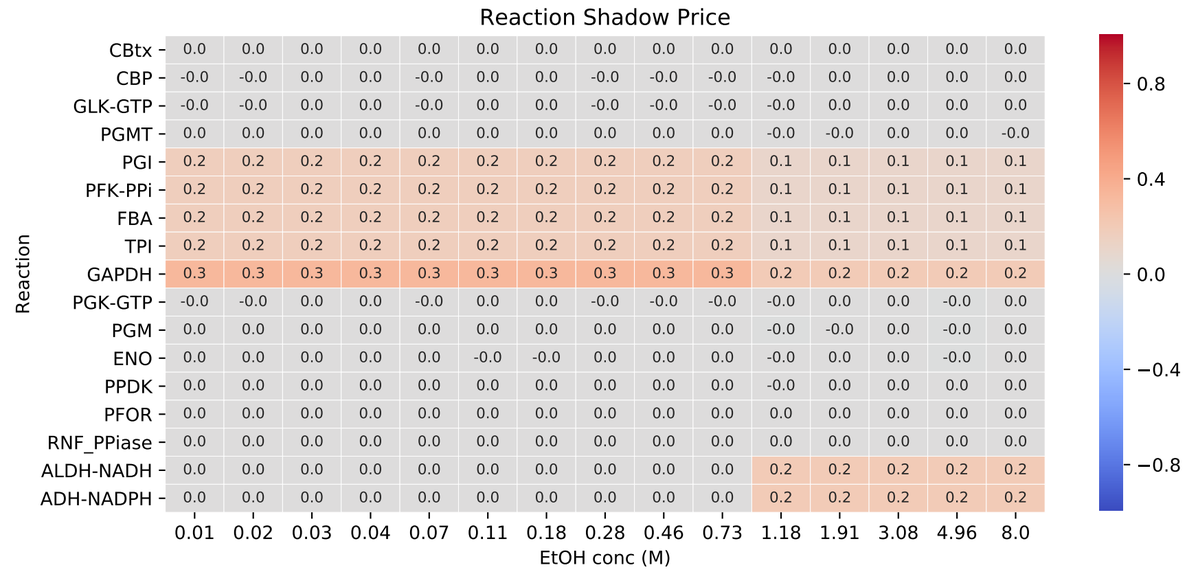
ΔG0=-260.97

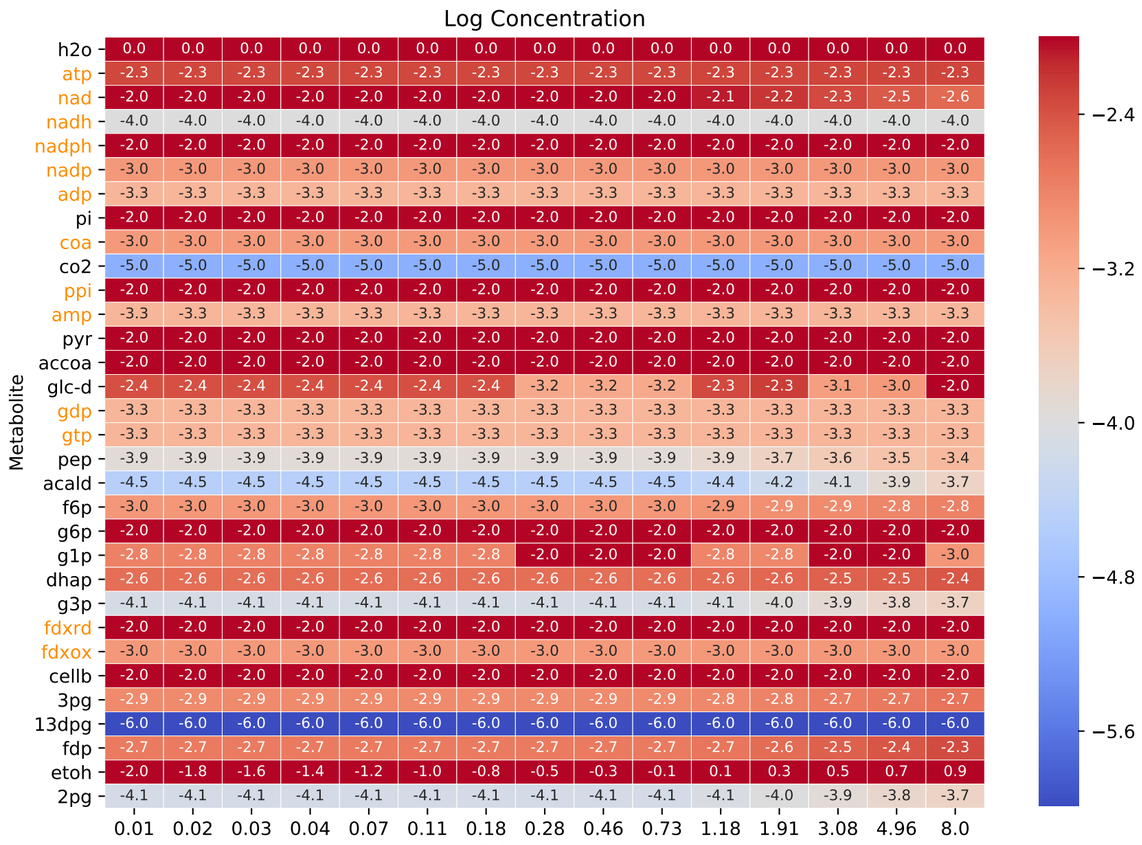
4 NAD+ + 4 NADPH + 2 Orthophosphate + 4 Diphosphate + 4 AMP + 3 GDP + Cellobiose = 5 H2O + 3 ATP + 4 NADH + 4 NADP+ + ADP + 4 CO2 + 3 GTP + 4 Ethanol

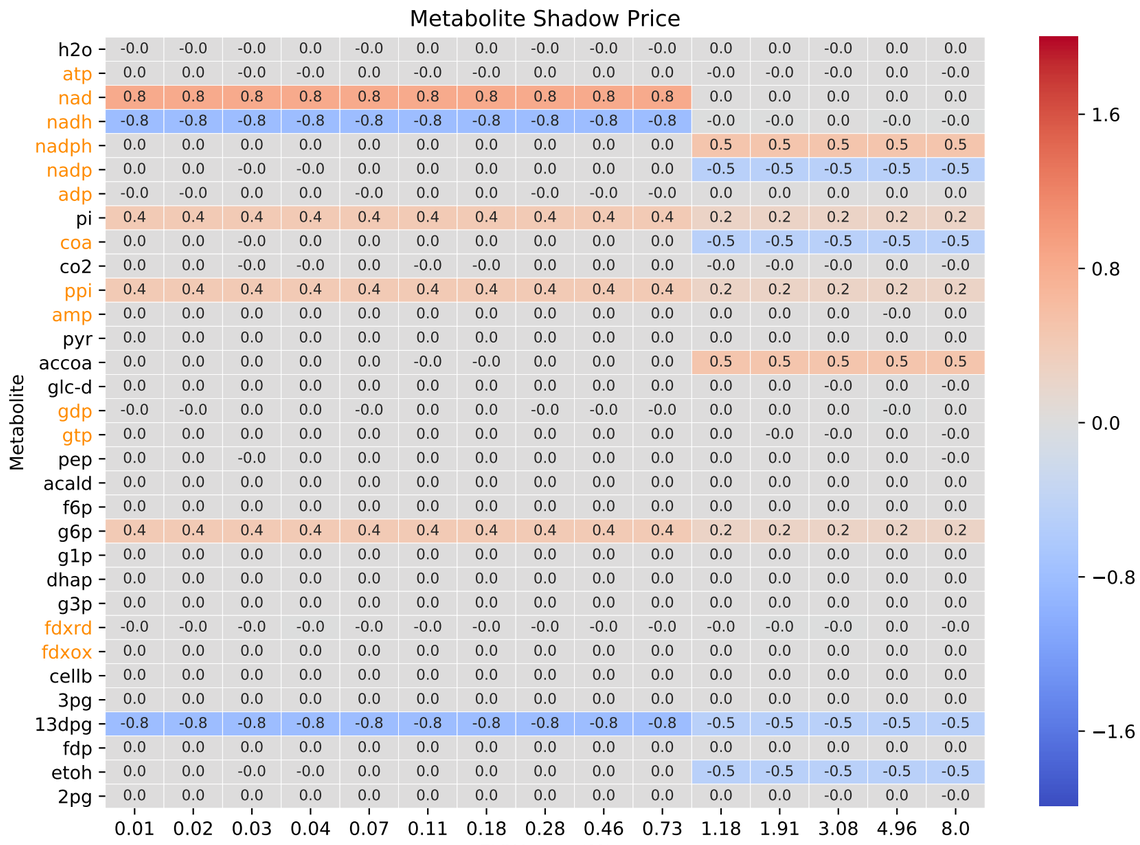








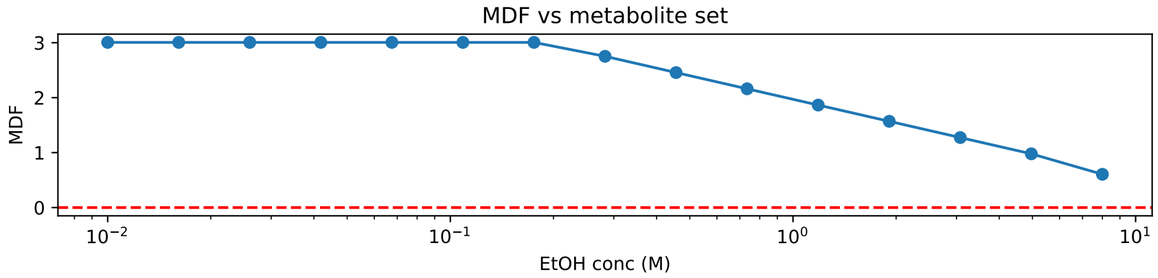


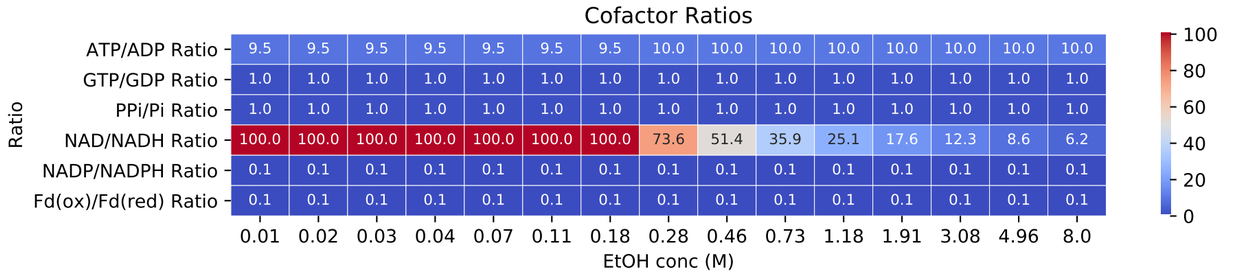


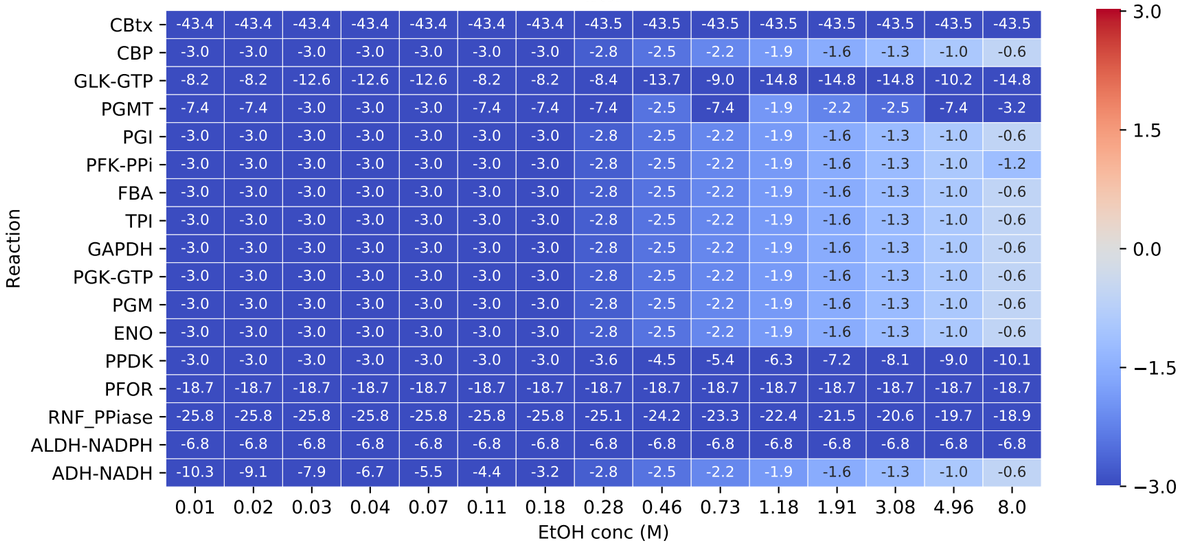
Analysis of flux set: aldh-ndp

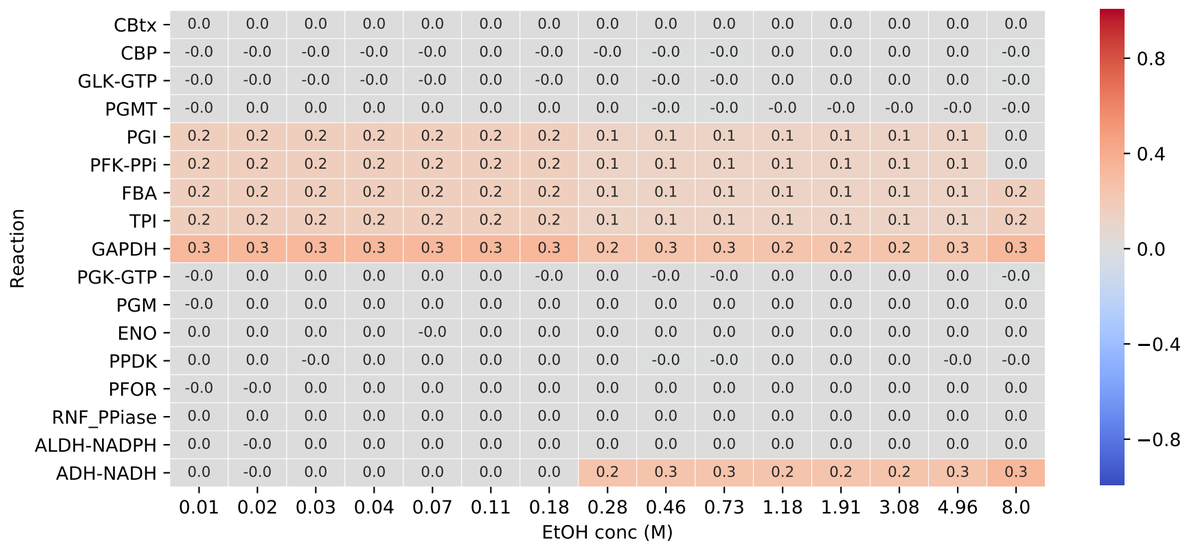
ΔG0=-260.97

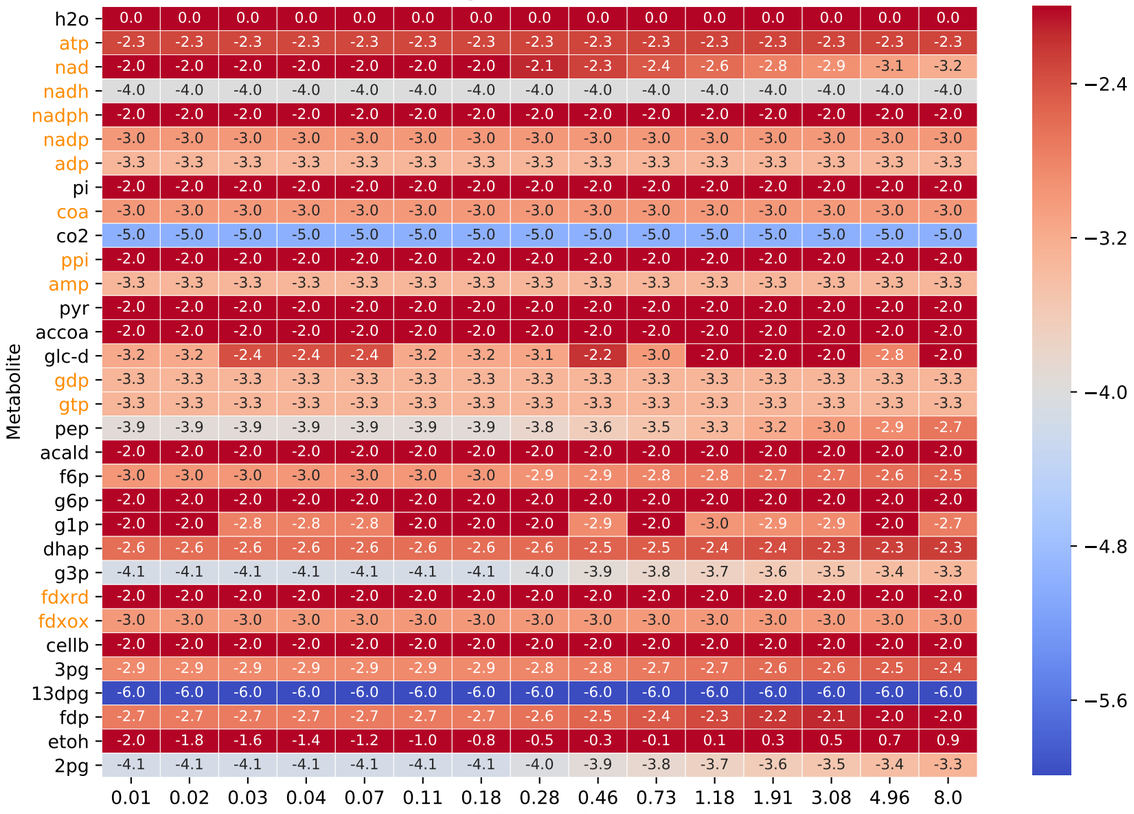
4 NAD+ + 4 NADPH + 2 Orthophosphate + 4 Diphosphate + 4 AMP + 3 GDP + Cellobiose = 5 H2O + 3 ATP + 4 NADH + 4 NADP+ + ADP + 4 CO2 + 3 GTP + 4 Ethanol

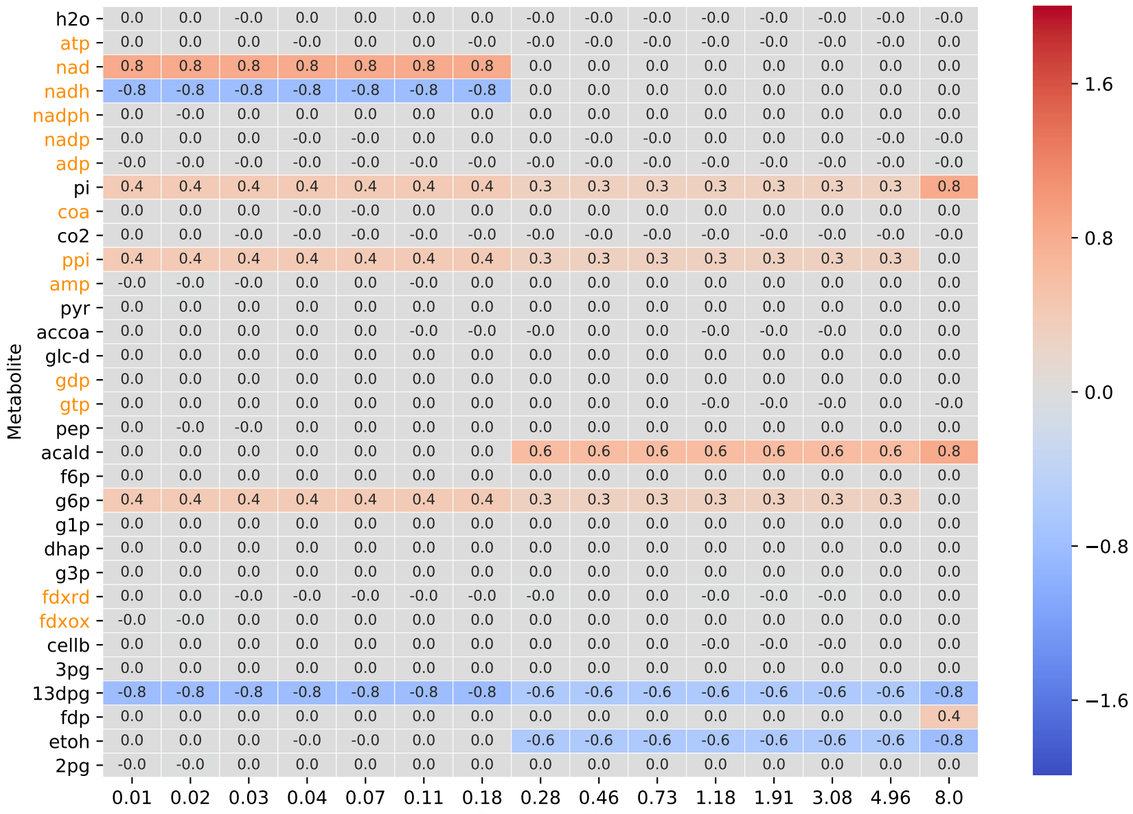








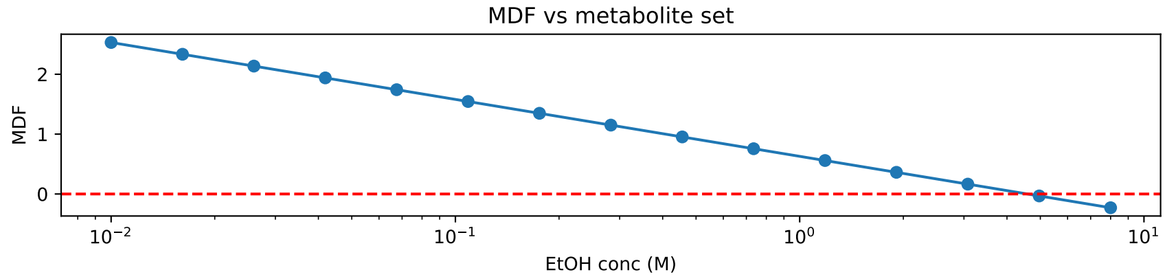


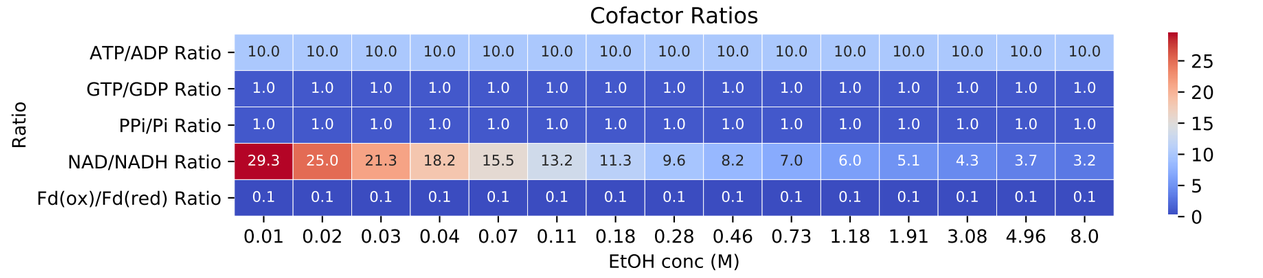


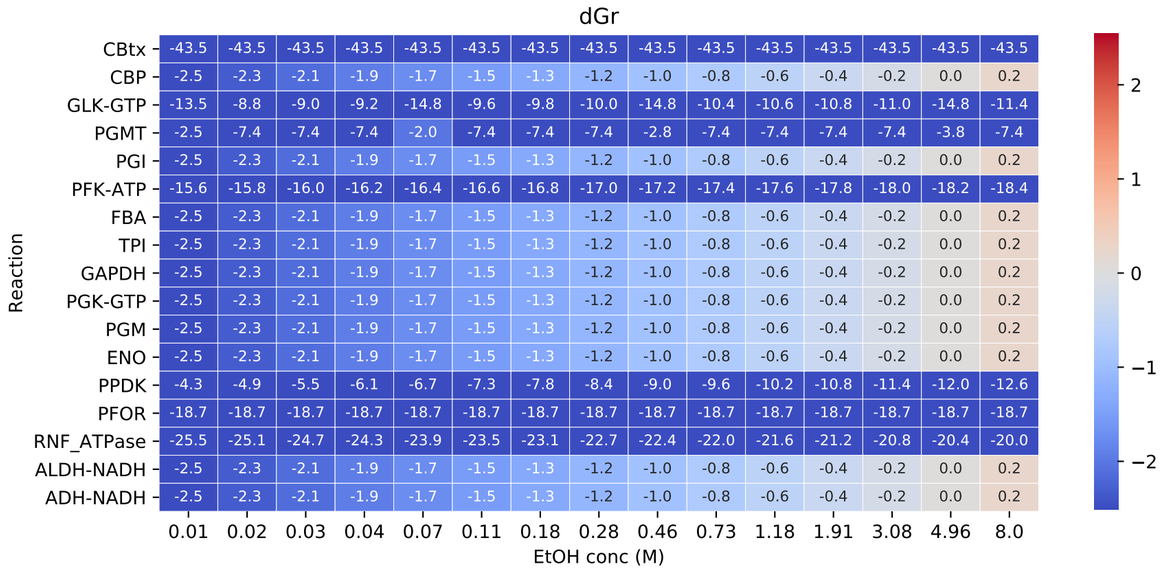
Analysis of flux set: atp-pfk

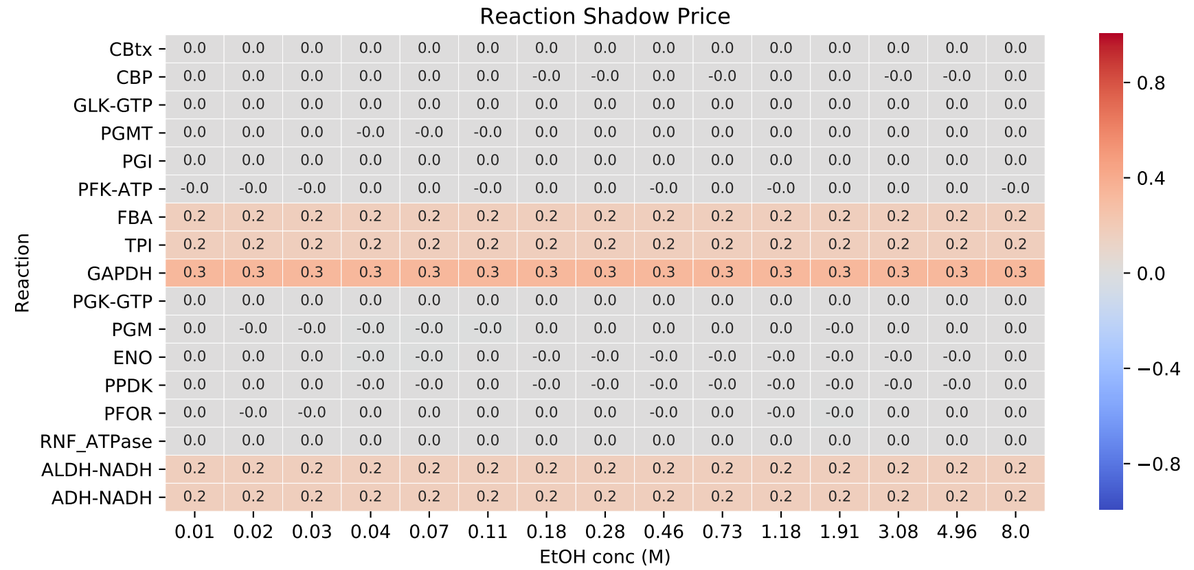
ΔG0=-283.40

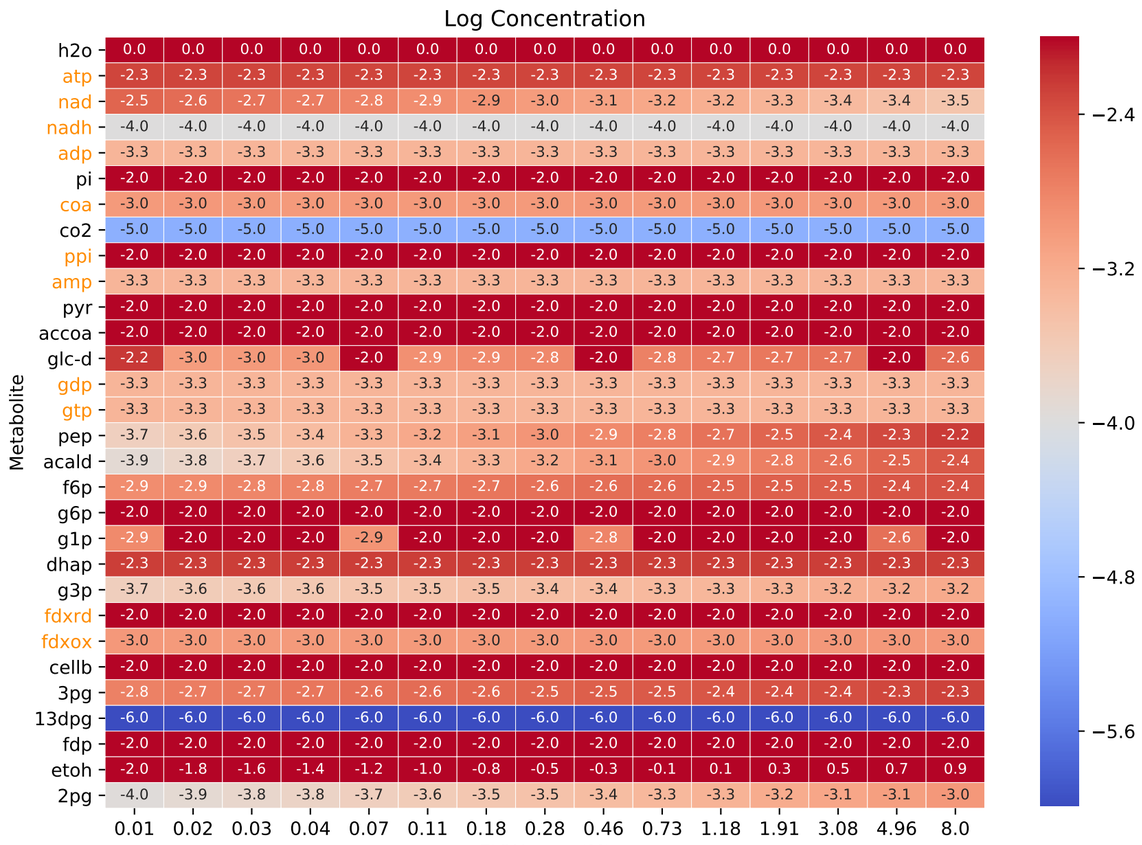
Orthophosphate + 4 Diphosphate + 4 AMP + 3 GDP + Cellobiose = 4 H2O + 2 ATP + 2 ADP + 4 CO2 + 3 GTP + 4 Ethanol

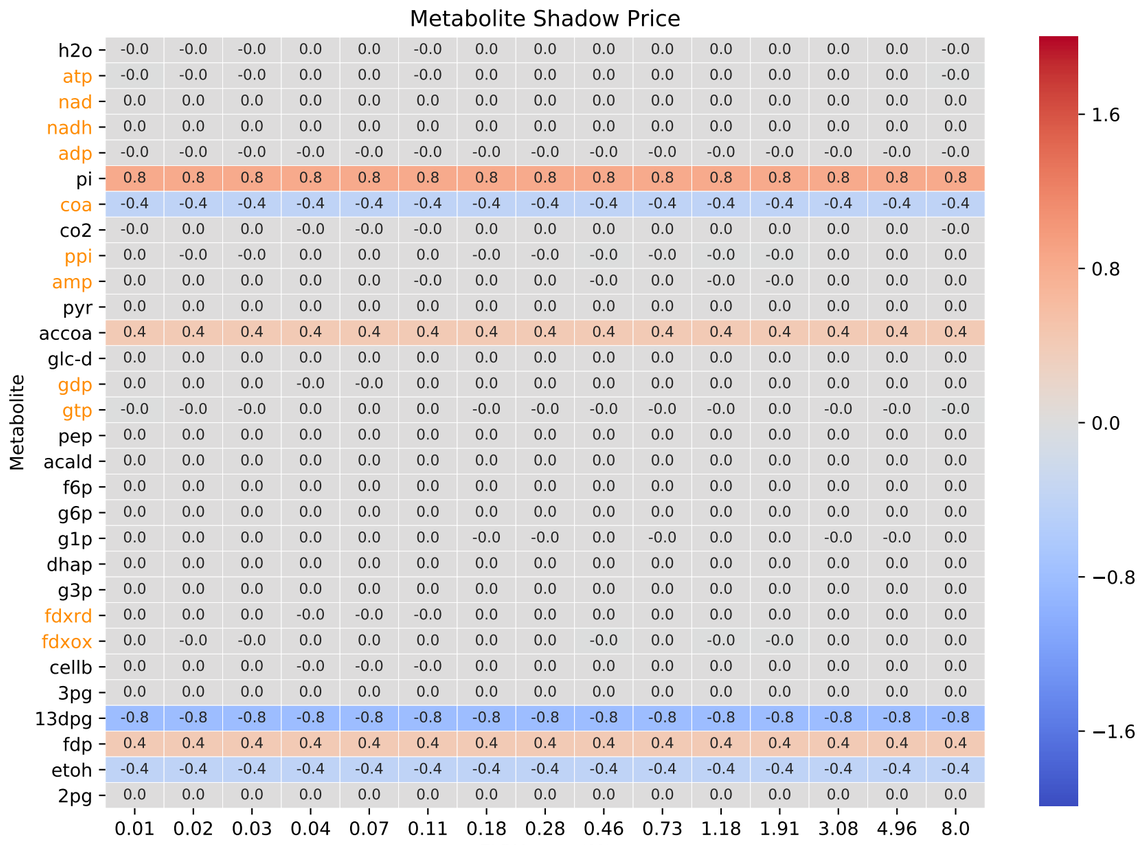








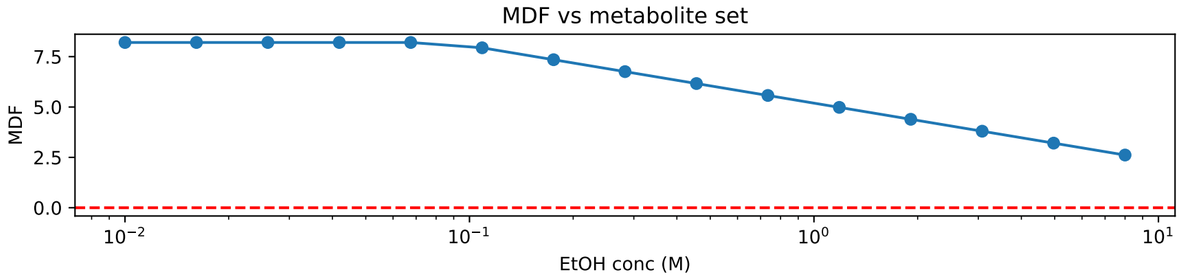


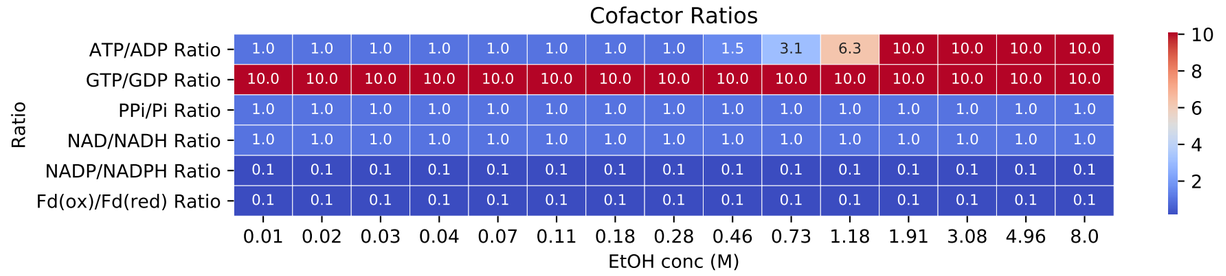


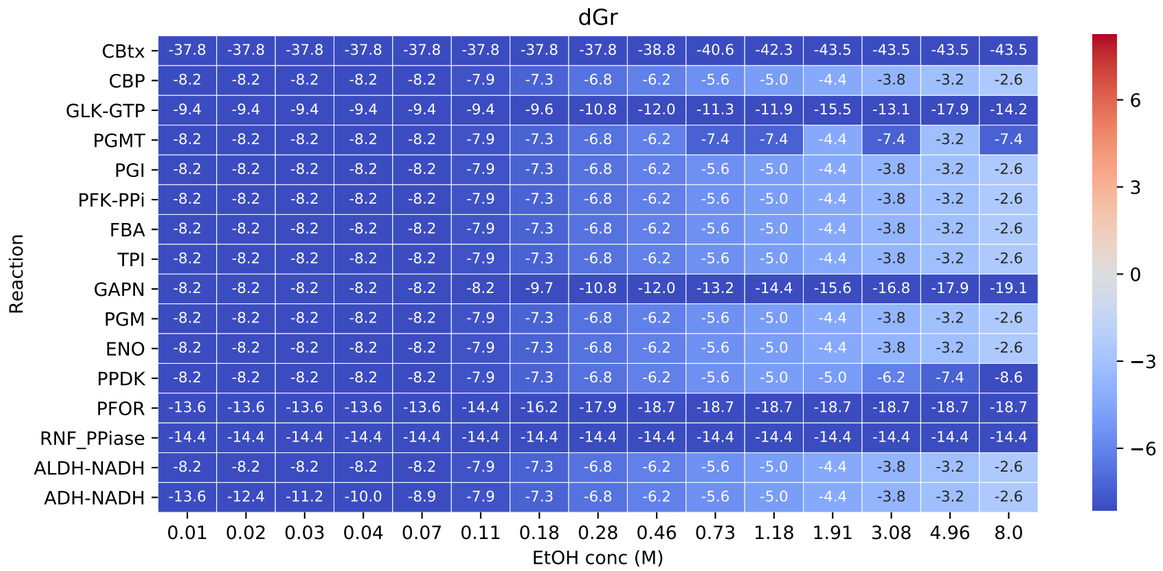
Analysis of flux set: gapn

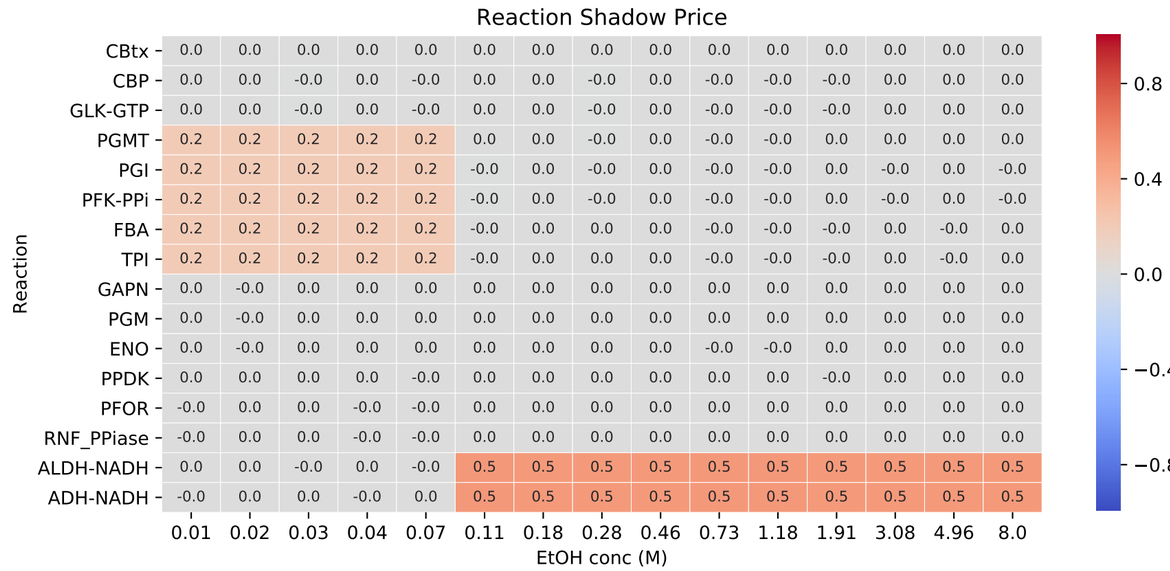
ΔG0=-348.74

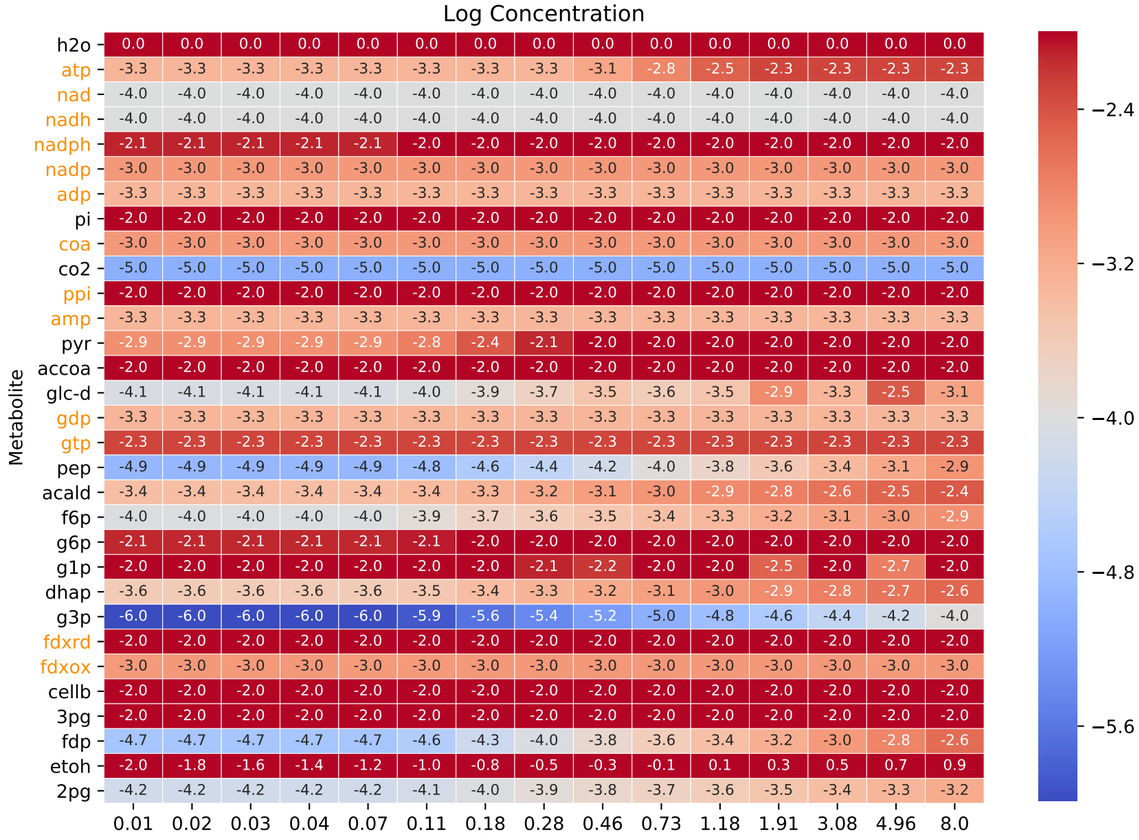
4 NADH + 4 NADP+ + 4 Diphosphate + 4 AMP + GTP + Cellobiose = H2O + 3 ATP + 4 NAD+ + 4 NADPH + ADP + 2 Orthophosphate + 4 CO2 + GDP + 4 Ethanol

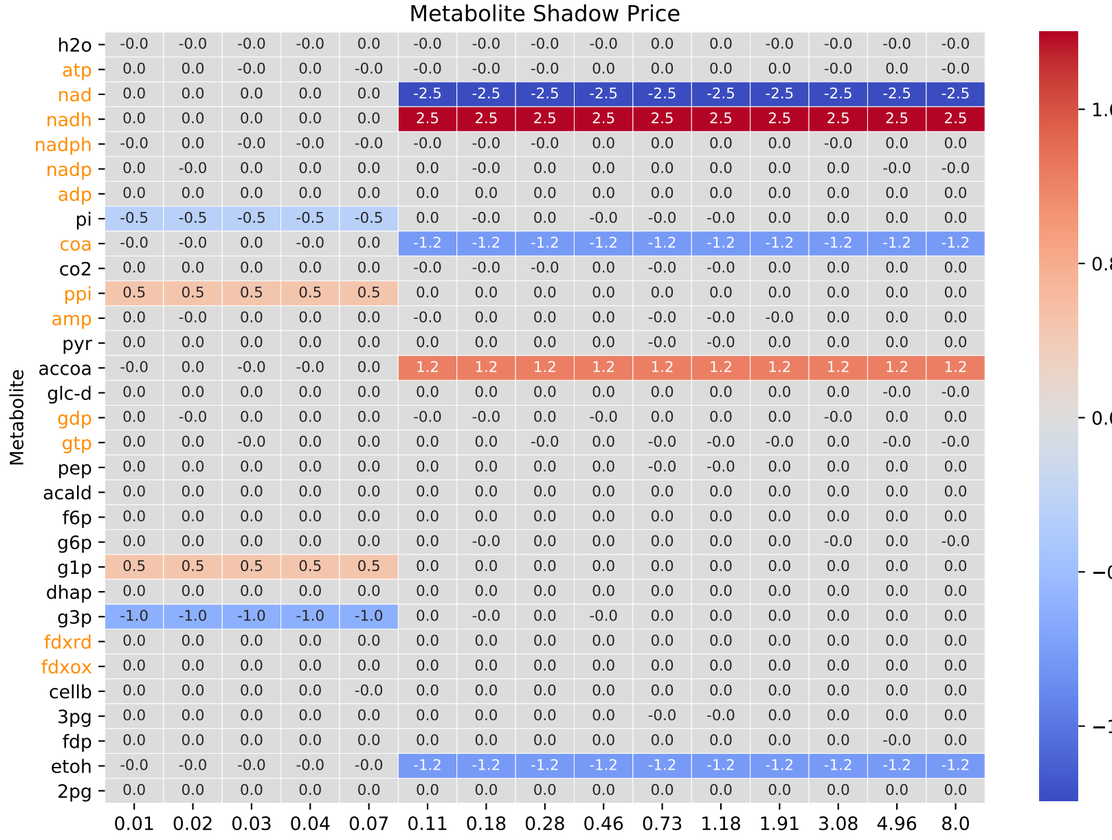






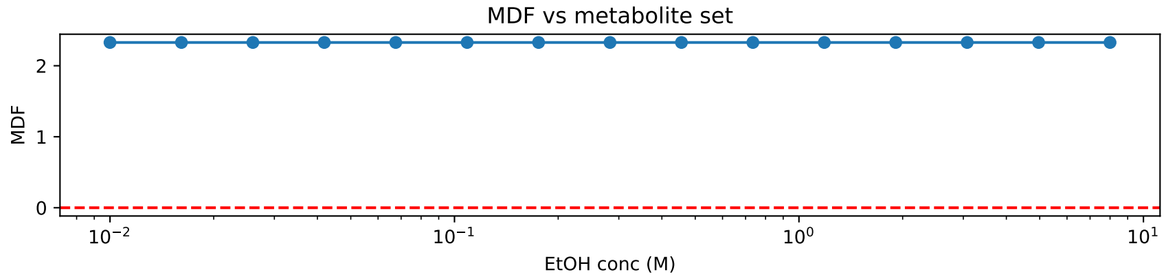


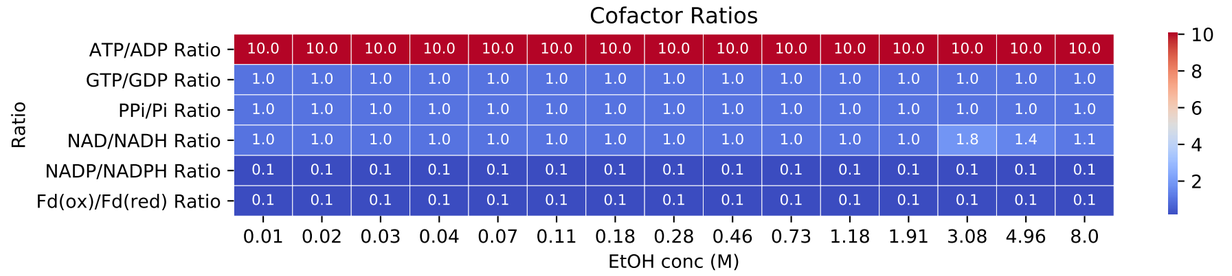


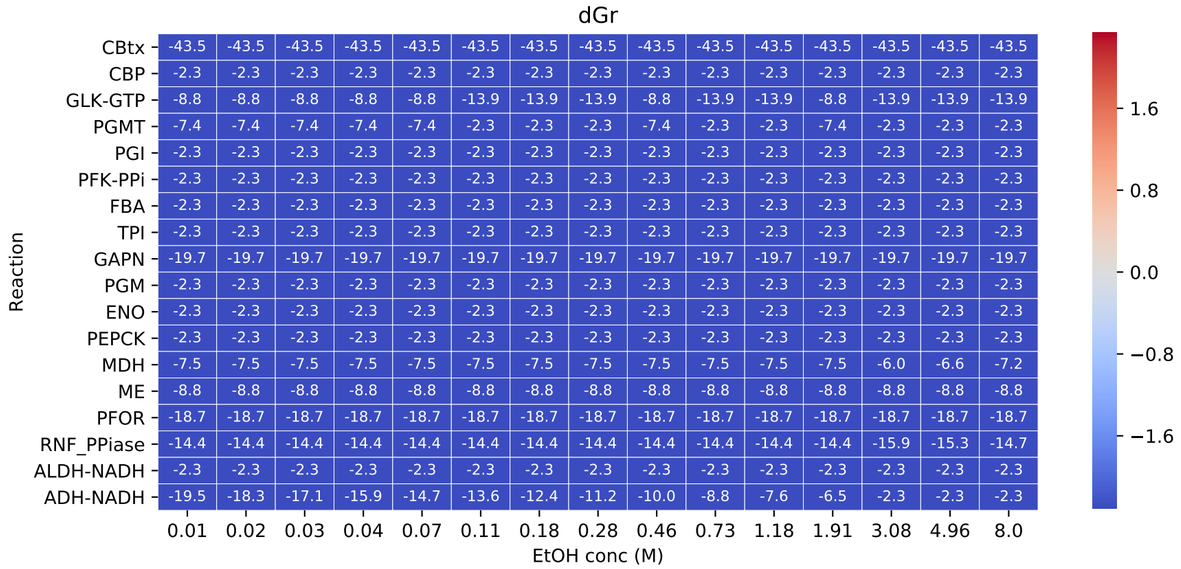


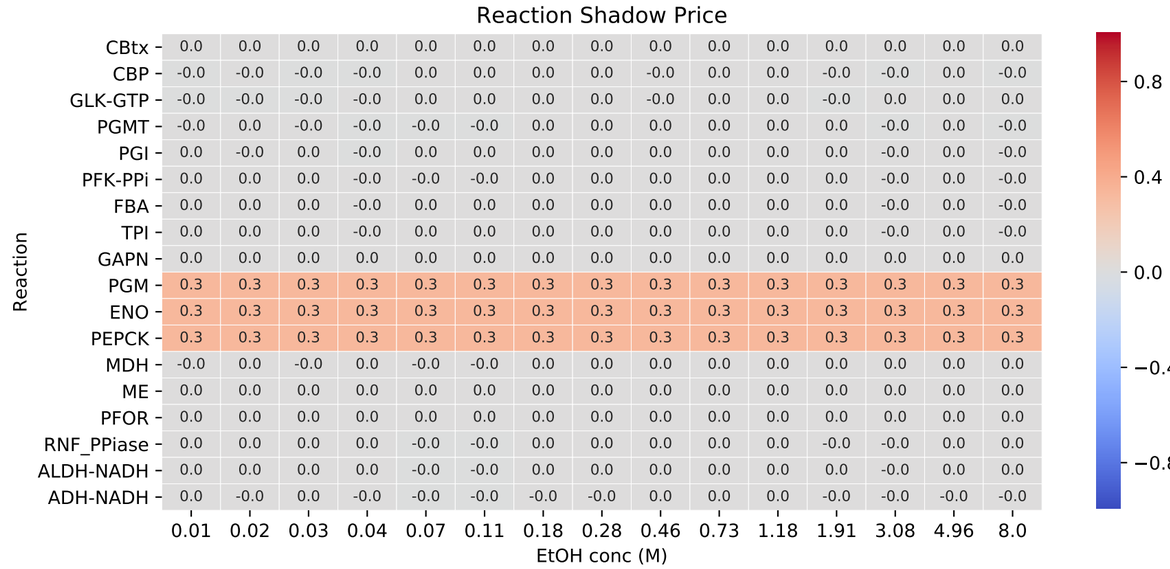
Analysis of flux set: mal-gapn

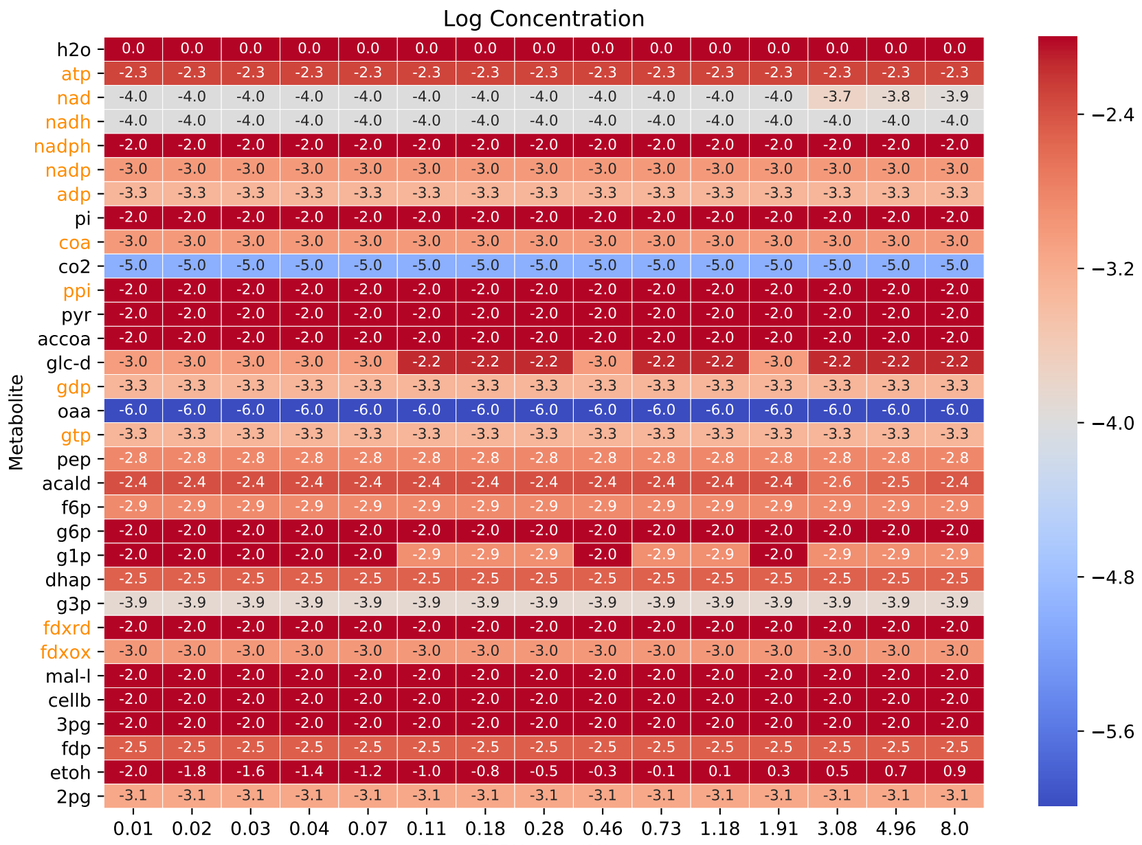
ΔG0=-386.89
ATP + 8 NADH + 8 NADP+ + 2 Orthophosphate + 3 GDP + Cellobiose = H2O + 8 NAD+ + 8 NADPH + ADP + 4 CO2 + 3 GTP + 4 Ethanol

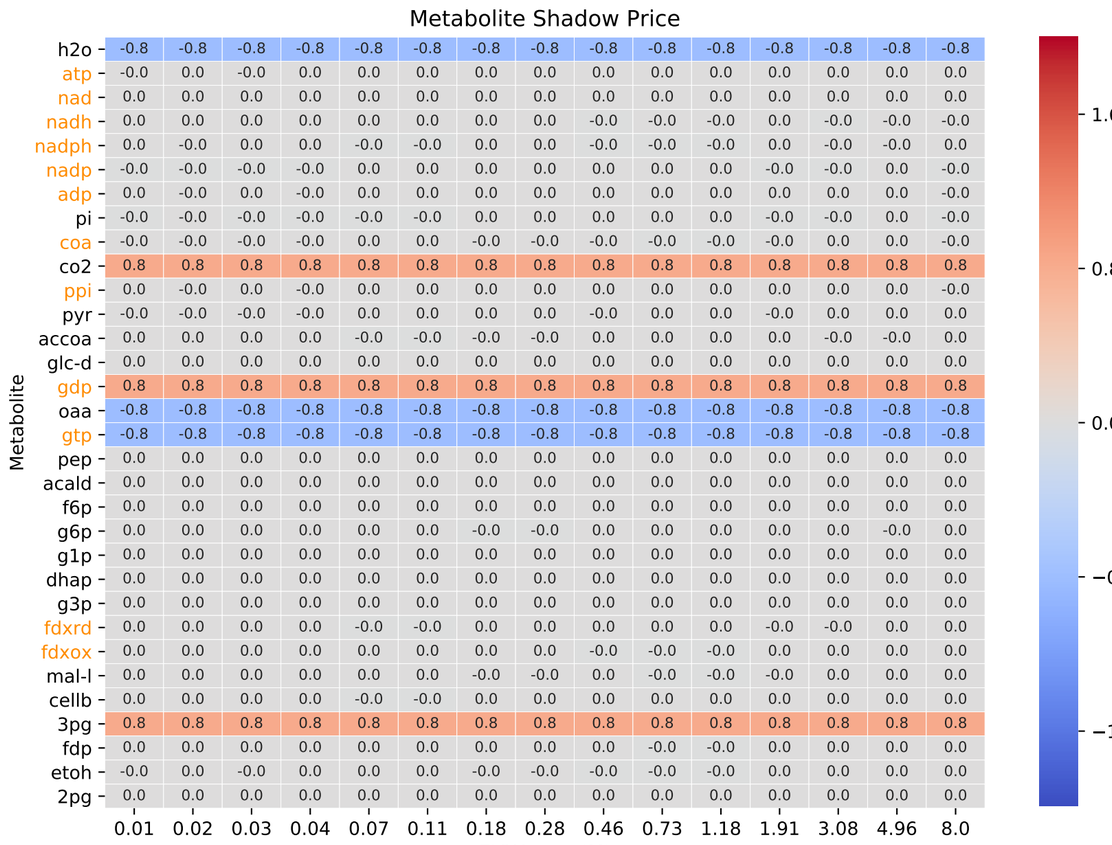






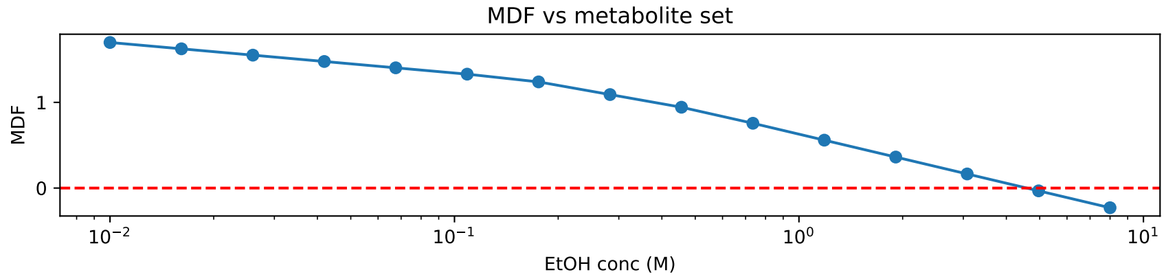


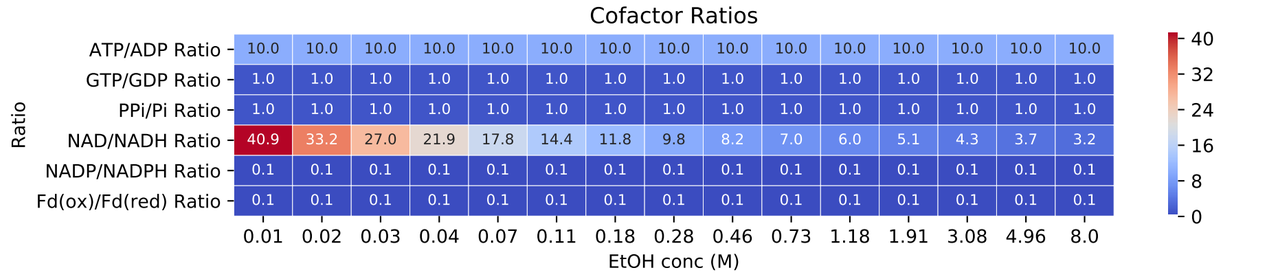


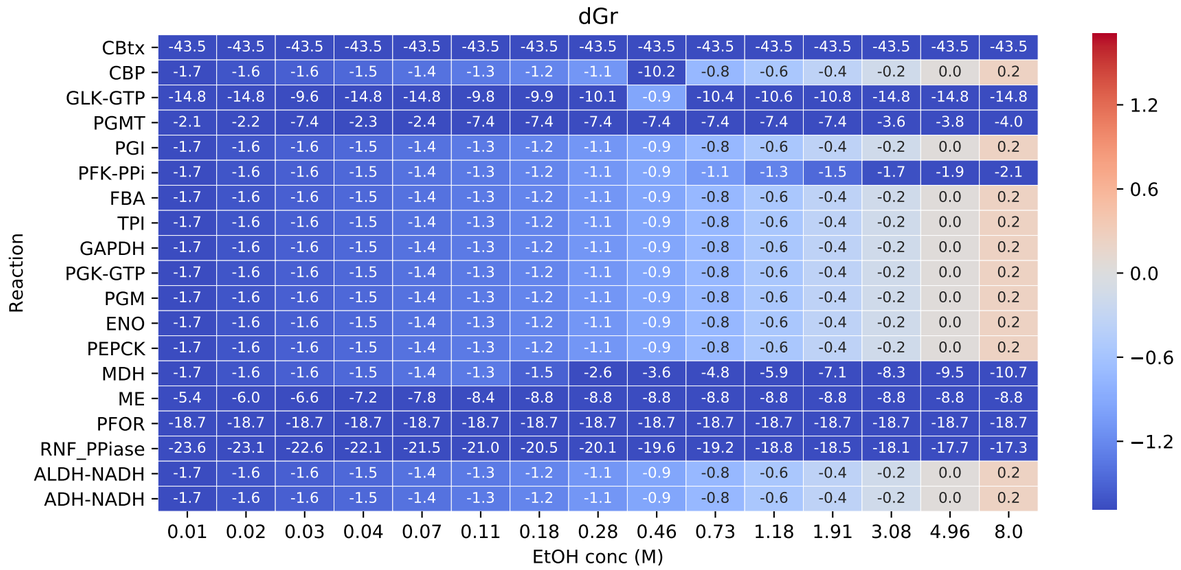


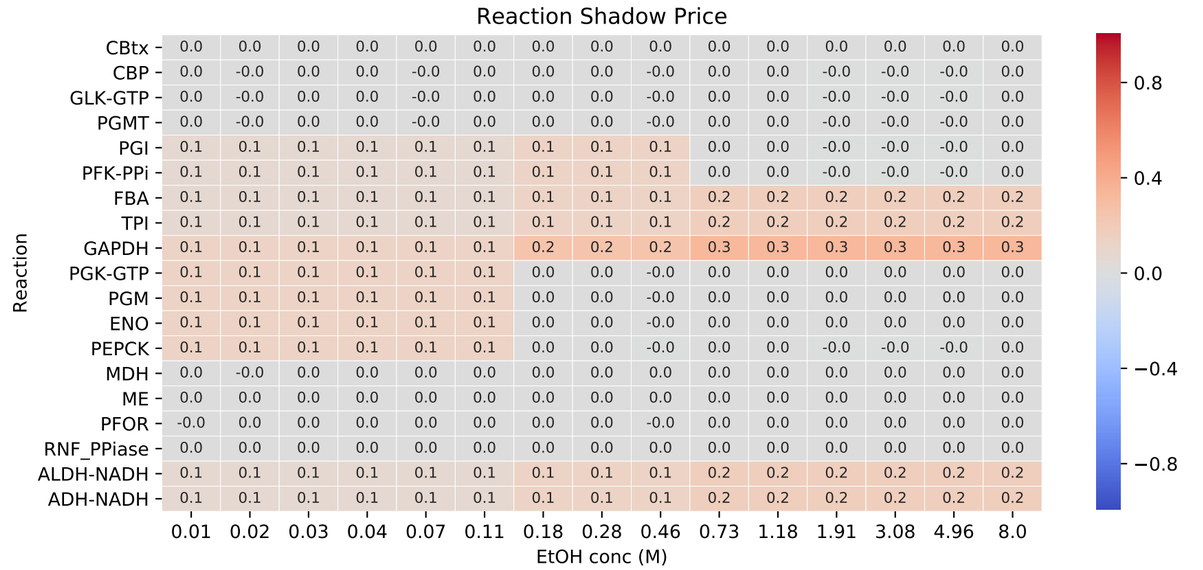
Analysis of flux set: mal-snt

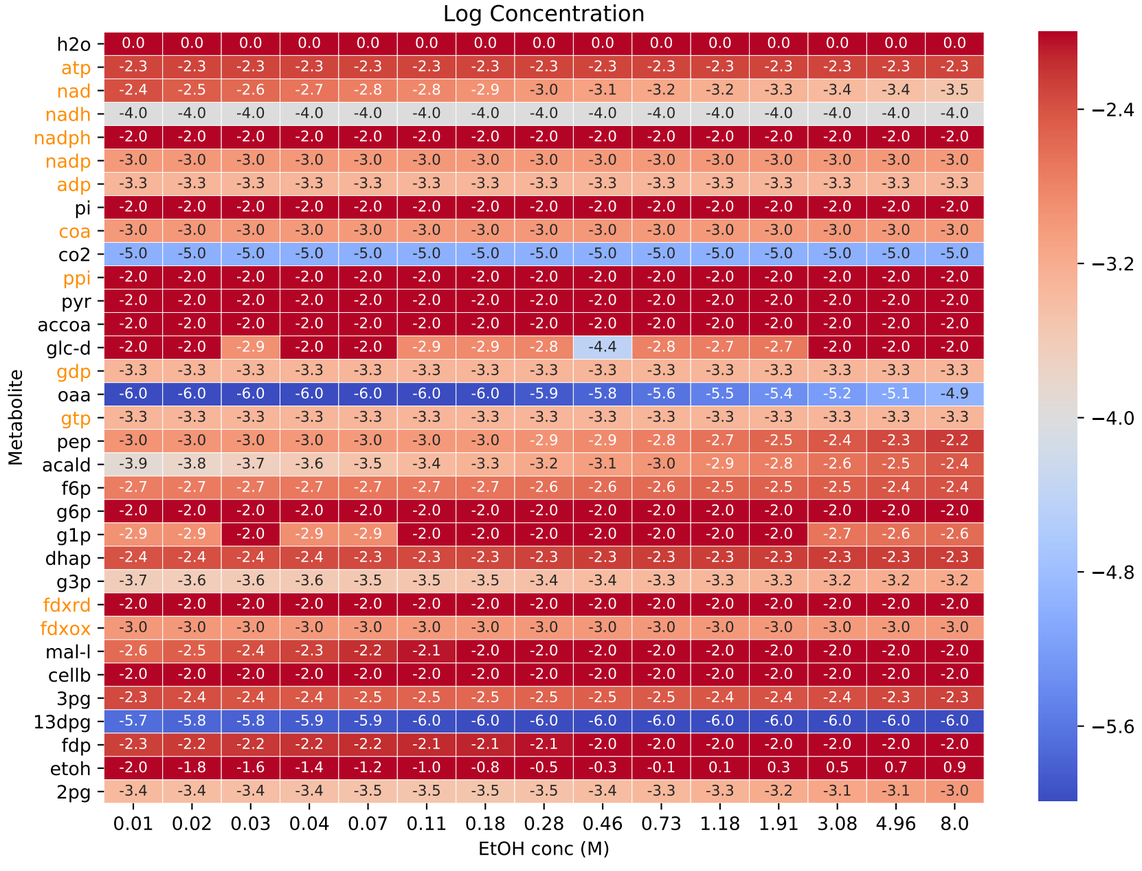
ΔG0=-295.16
ATP + 4 NADH + 4 NADP+ + 6 Orthophosphate + 7 GDP + Cellobiose = 5 H2O + 4 NAD+ + 4 NADPH + ADP + 4 CO2 + 7 GTP + 4 Ethanol

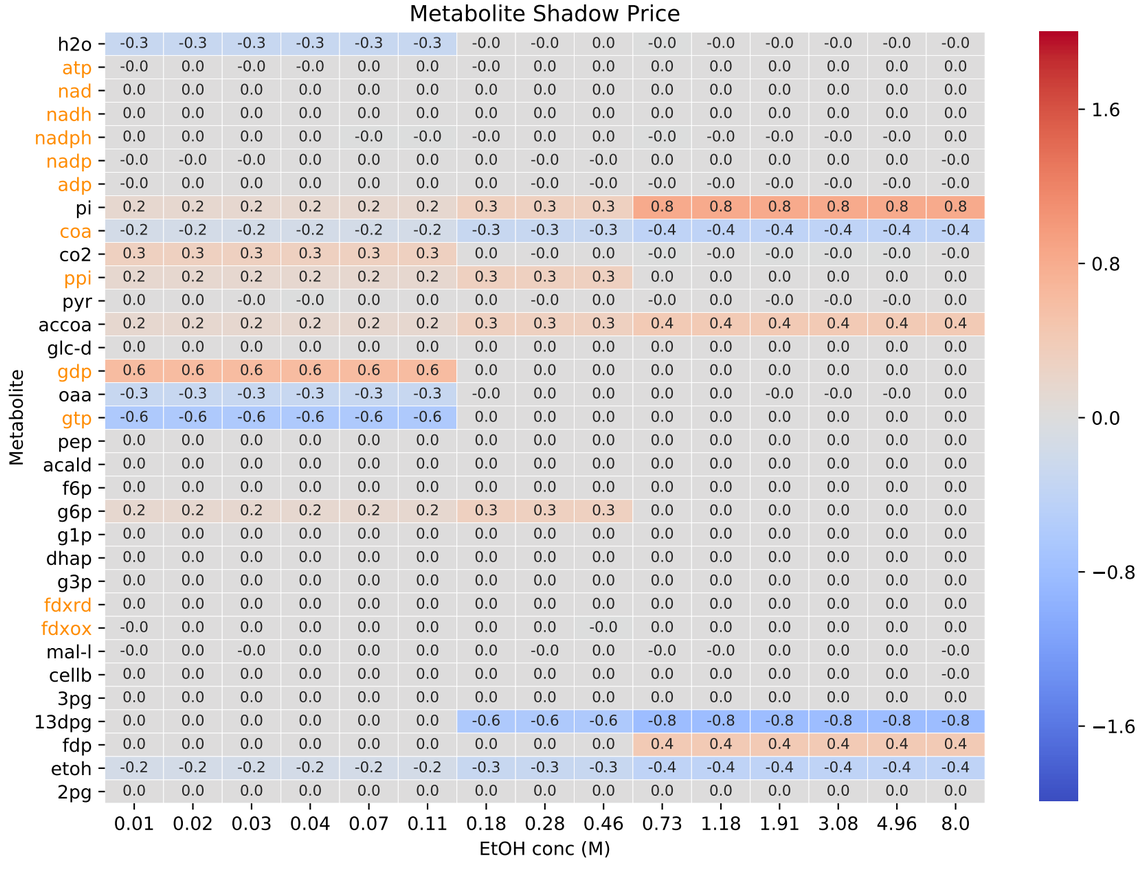






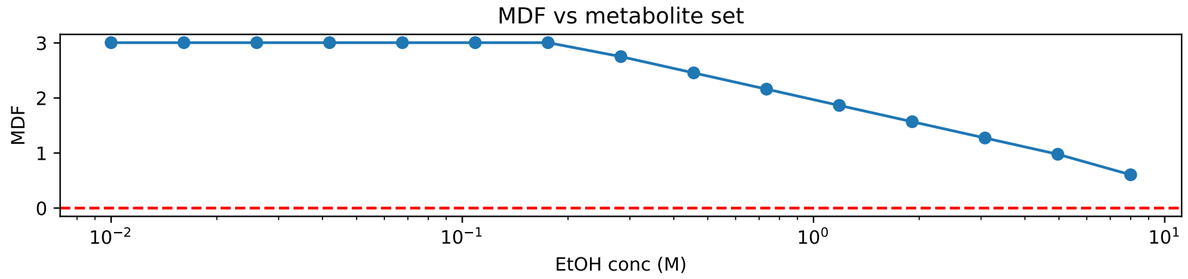


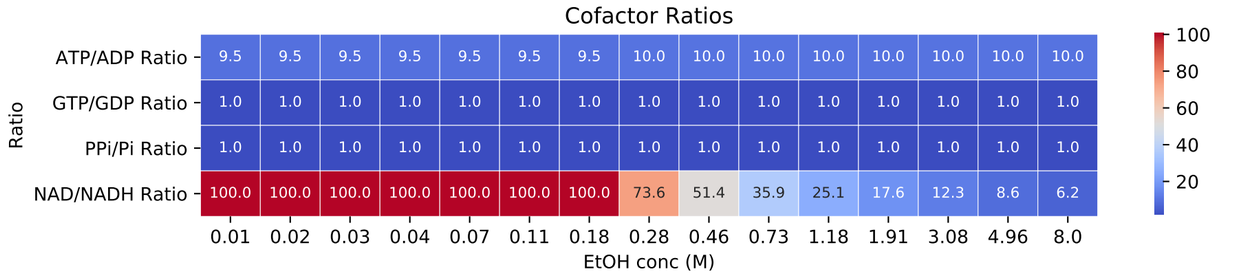


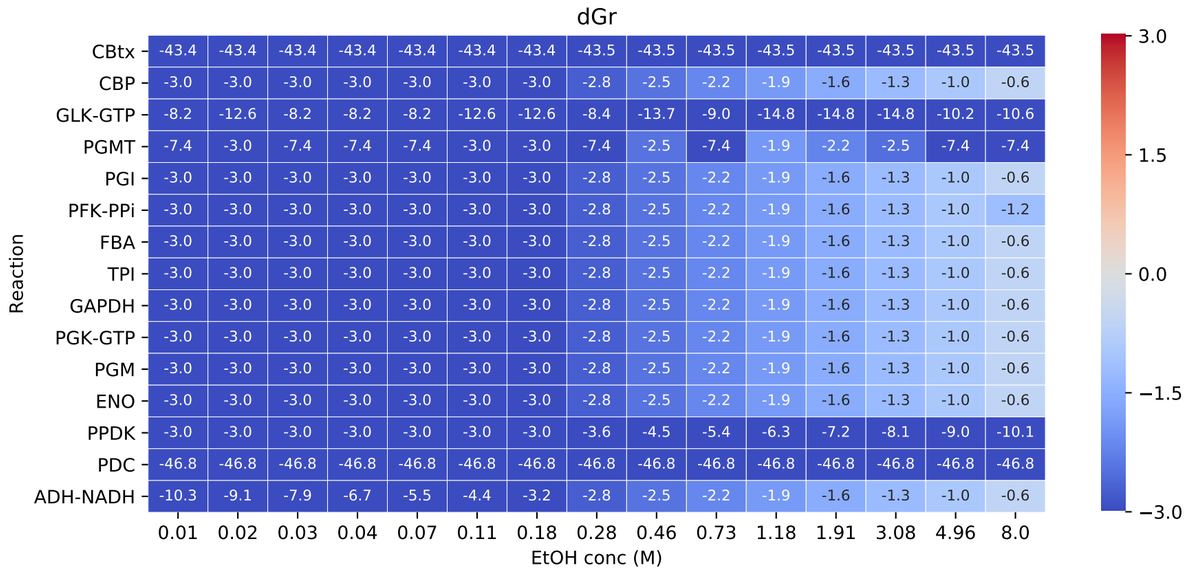


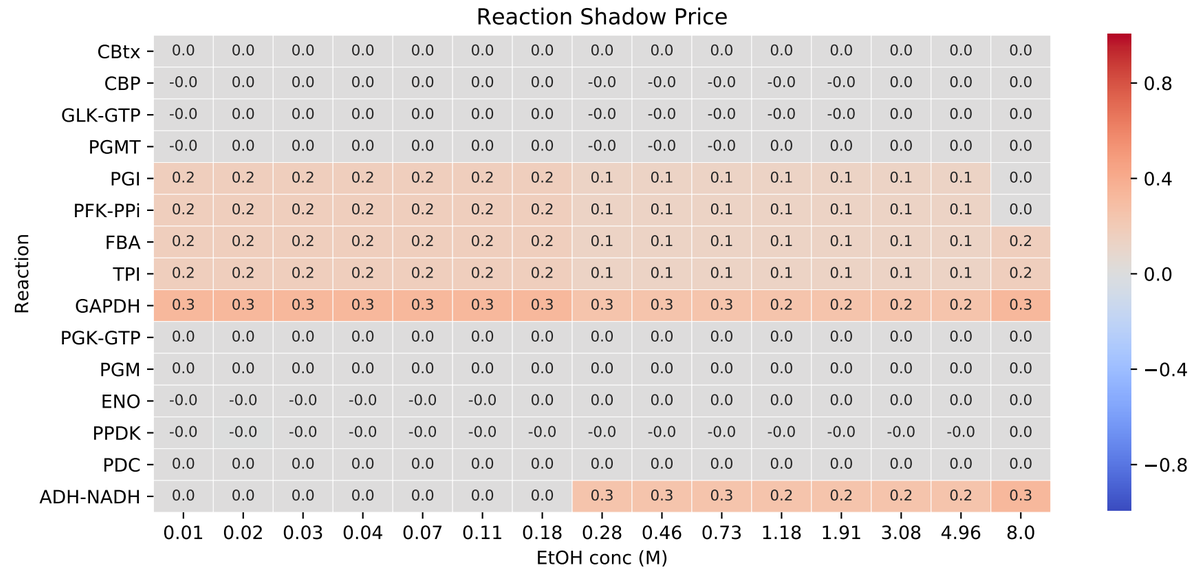
Analysis of flux set: pdc

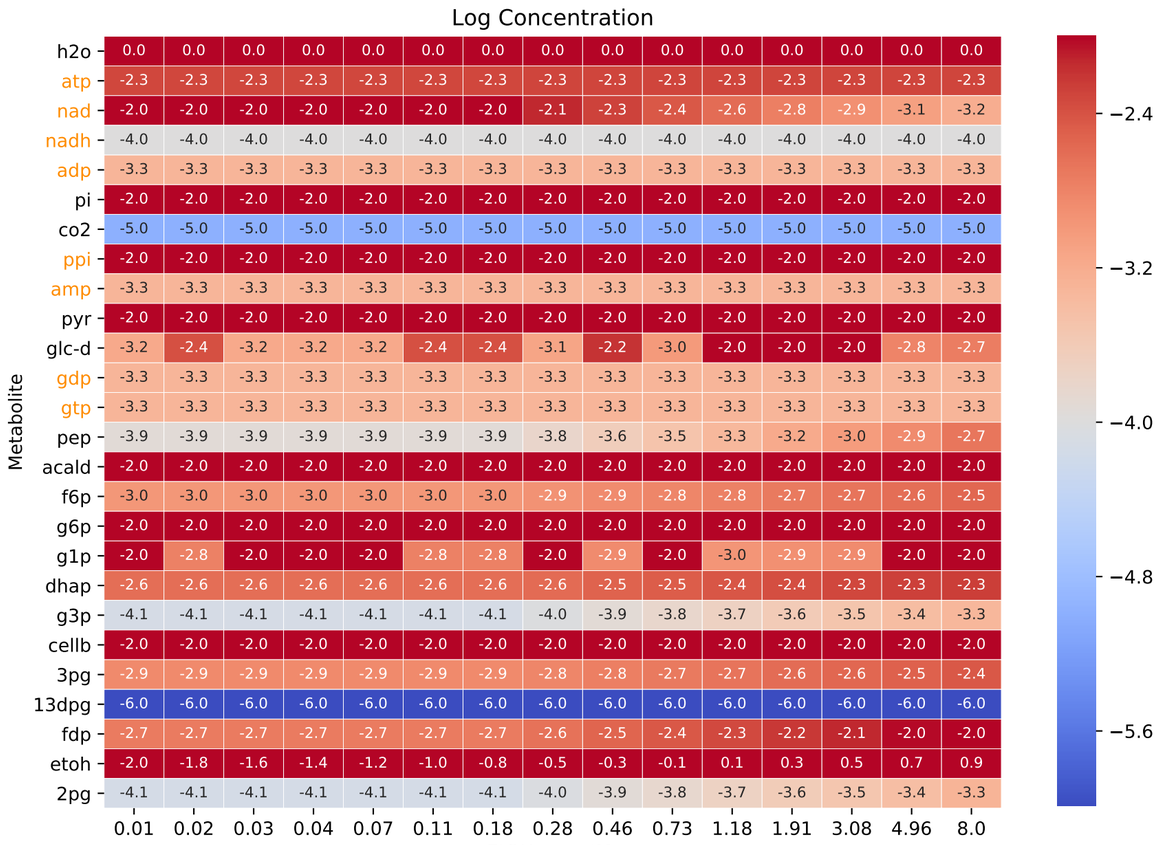
ΔG0=-288.57
6 Diphosphate + 4 AMP + 3 GDP + Cellobiose = 3 H2O + 3 ATP + ADP + 2 Orthophosphate + 4 CO2 + 3 GTP + 4 Ethanol

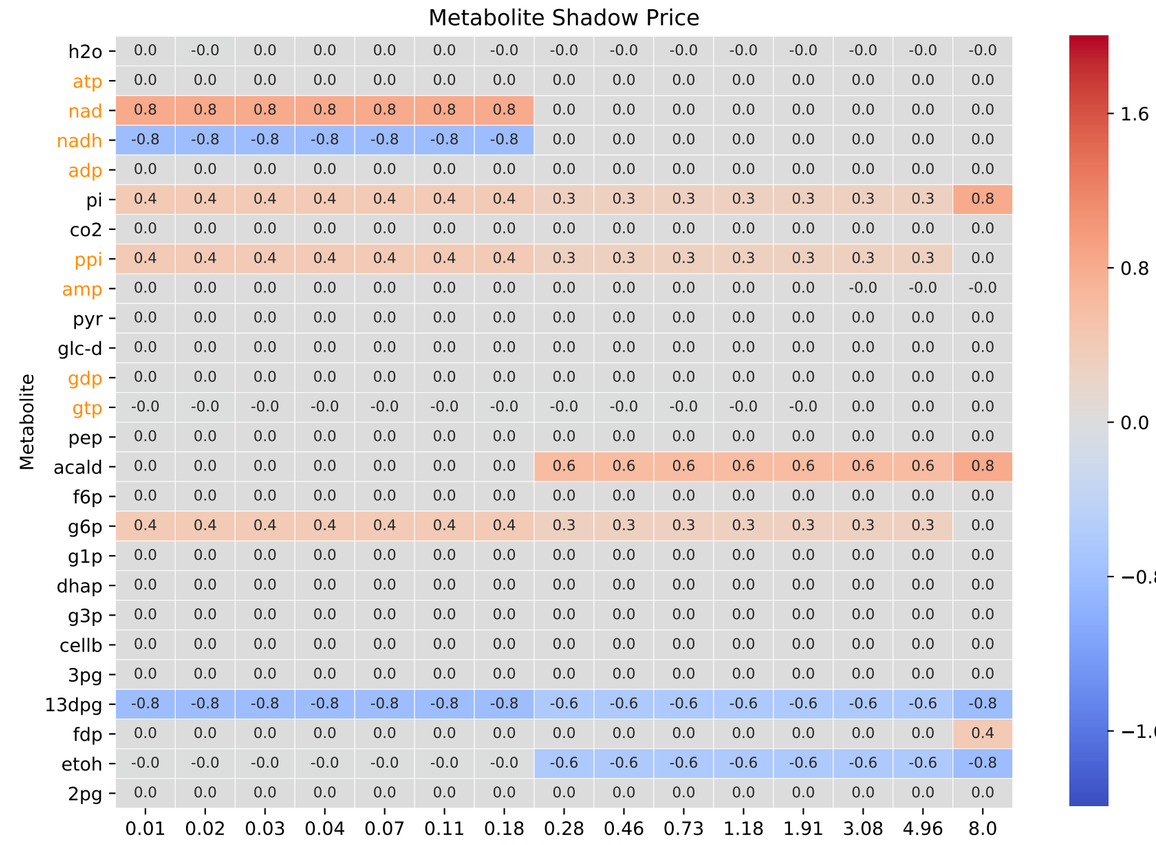








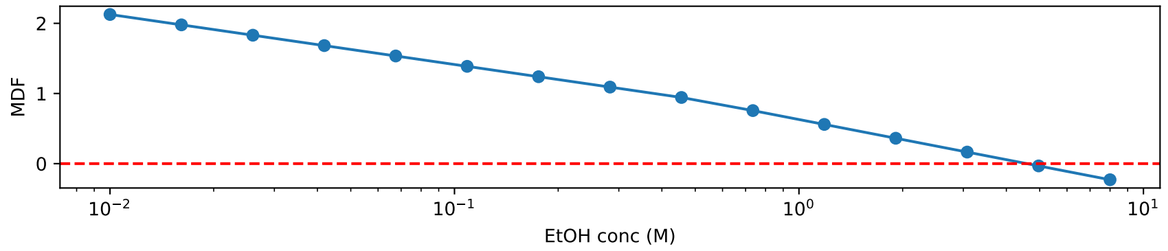




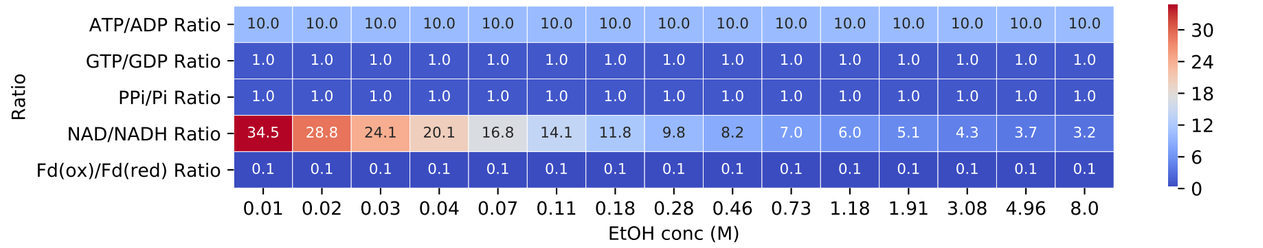
Analysis of flux set: ppi-pfk

ΔG0=-257.01
2 Orthophosphate + 4 Diphosphate + 4 AMP + 3 GDP + Cellobiose = 5 H2O + 3 ATP + ADP + 4 CO2 + 3 GTP + 4 Ethanol

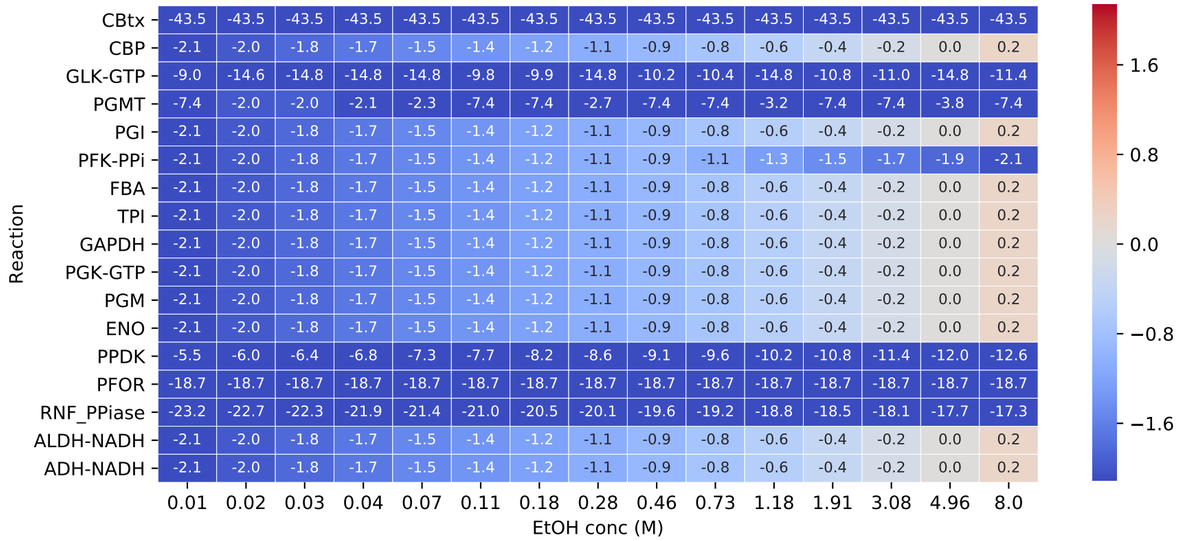
MDF vs metabolite set



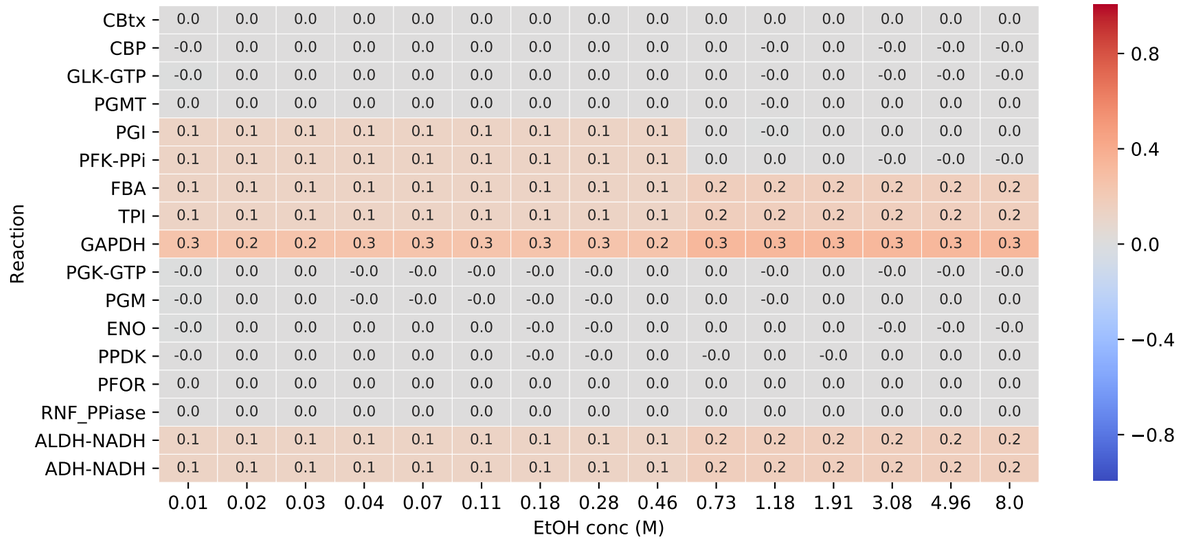
Cofactor Ratios



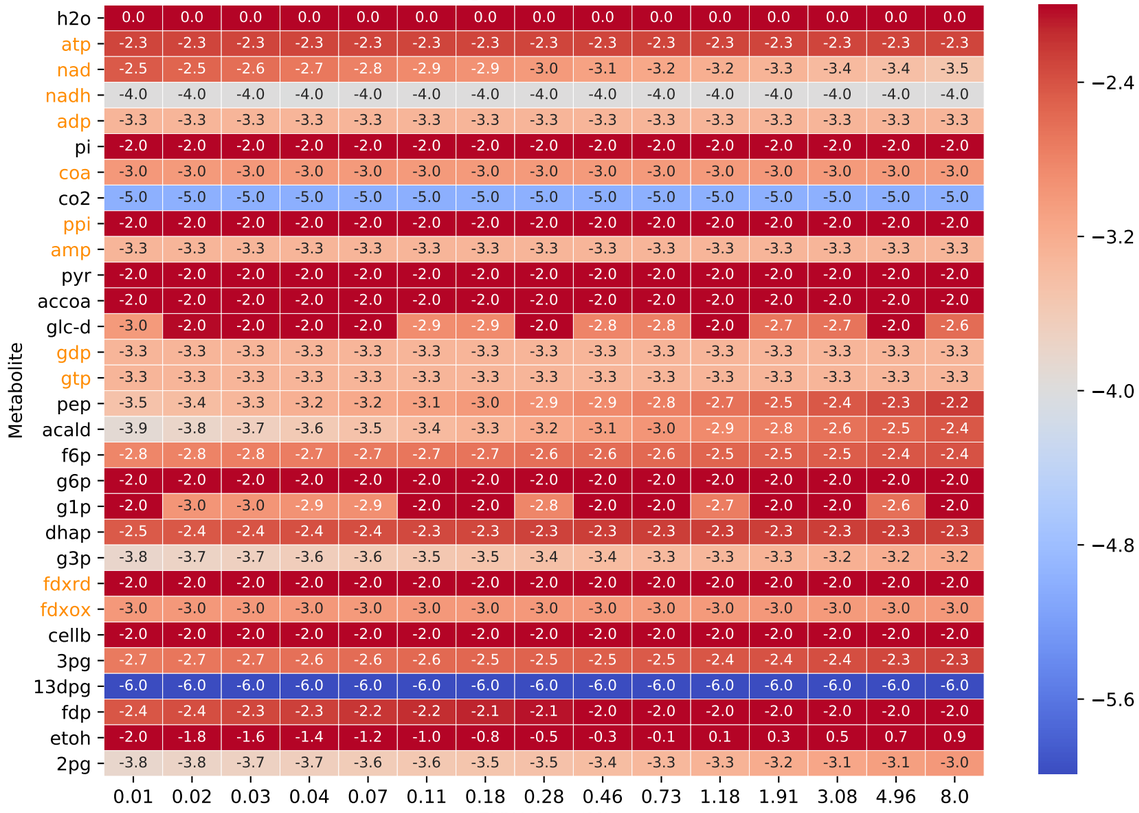
dGr



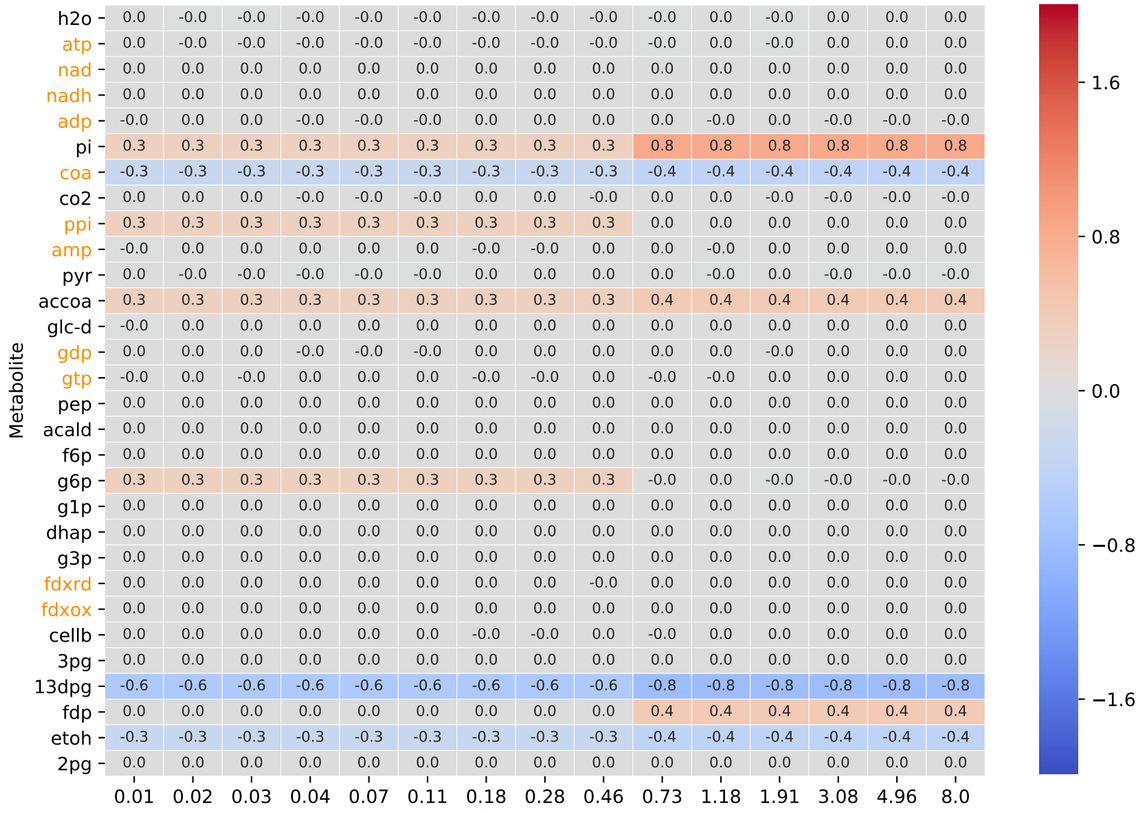
Reaction Shadow Price



Log Concentration

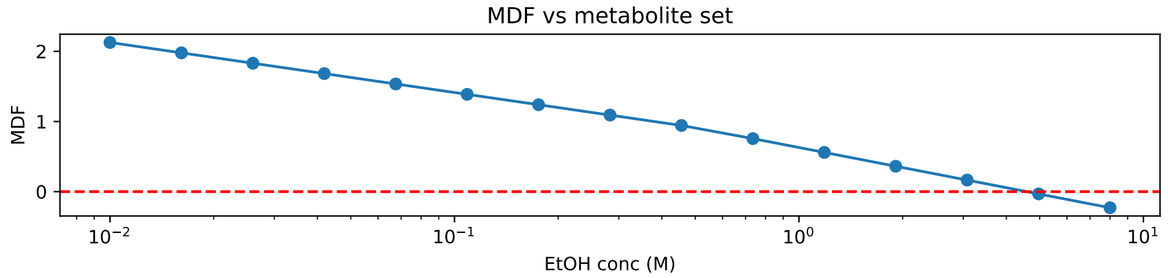


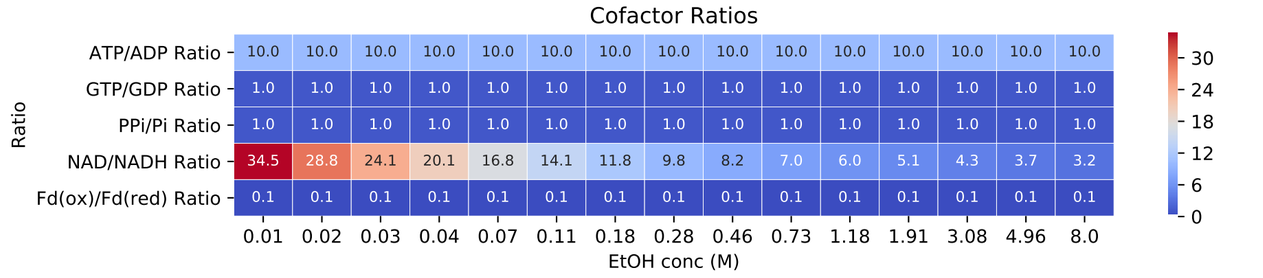
Metabolite Shadow Price

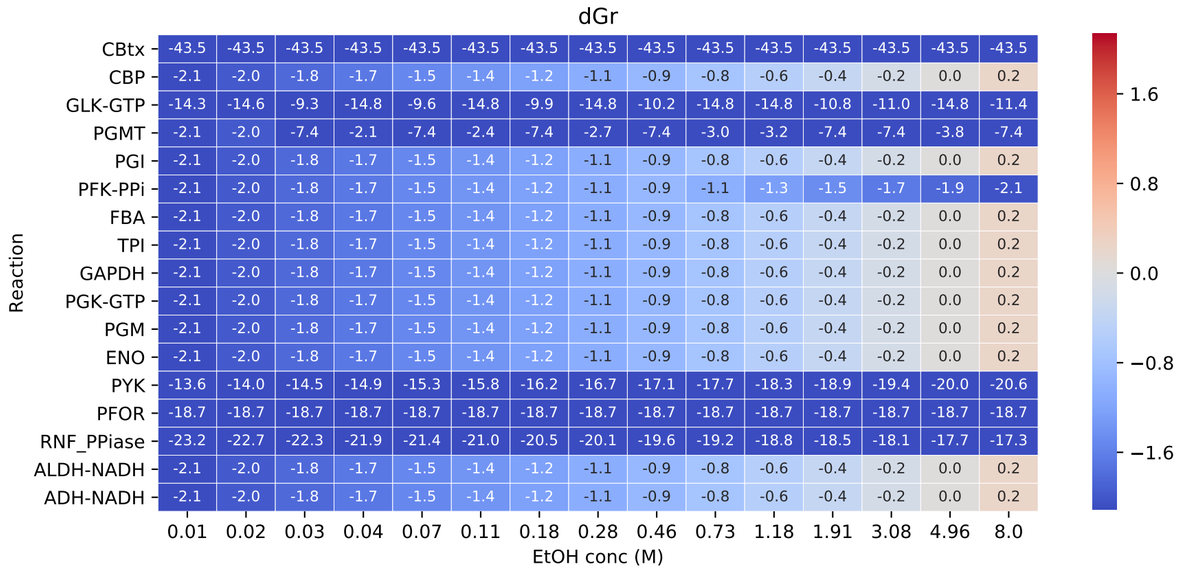


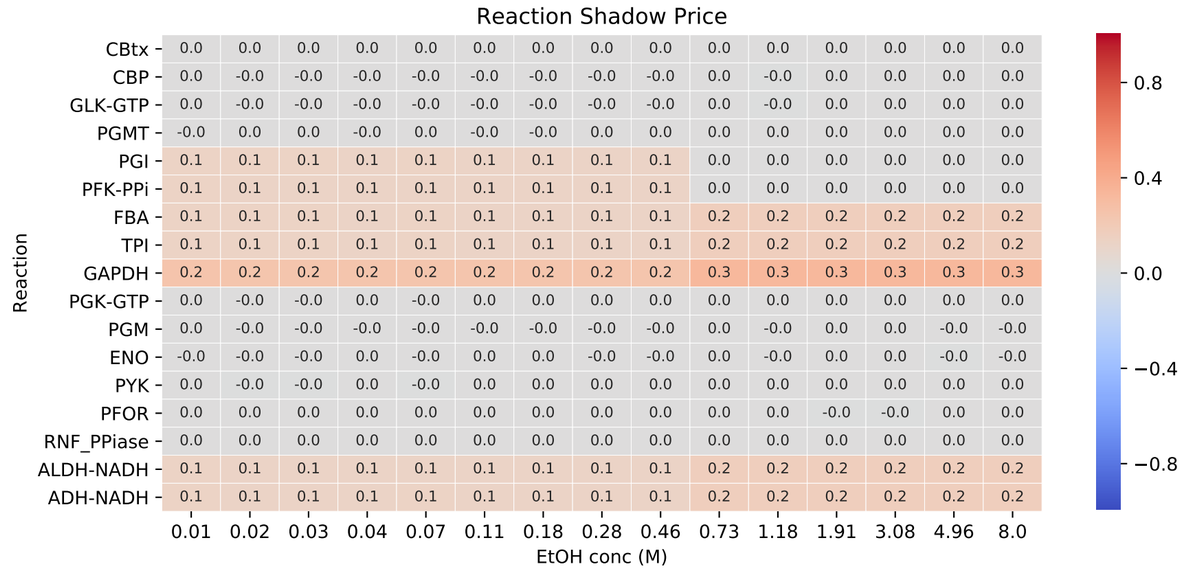
Analysis of flux set: pyk

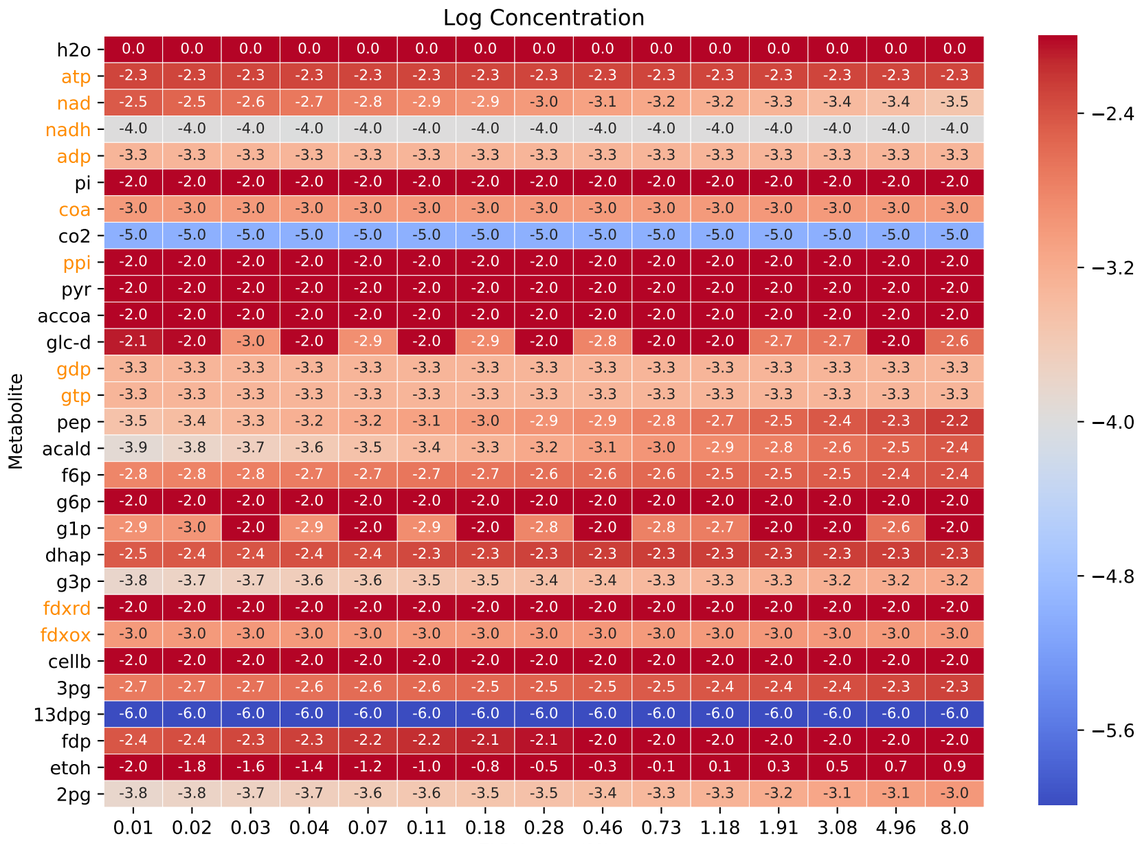
ΔG0=-289.23
3 ADP + 6 Orthophosphate + 3 GDP + Cellobiose = 5 H2O + 3 ATP + 4 CO2 + 3 GTP + 4 Ethanol

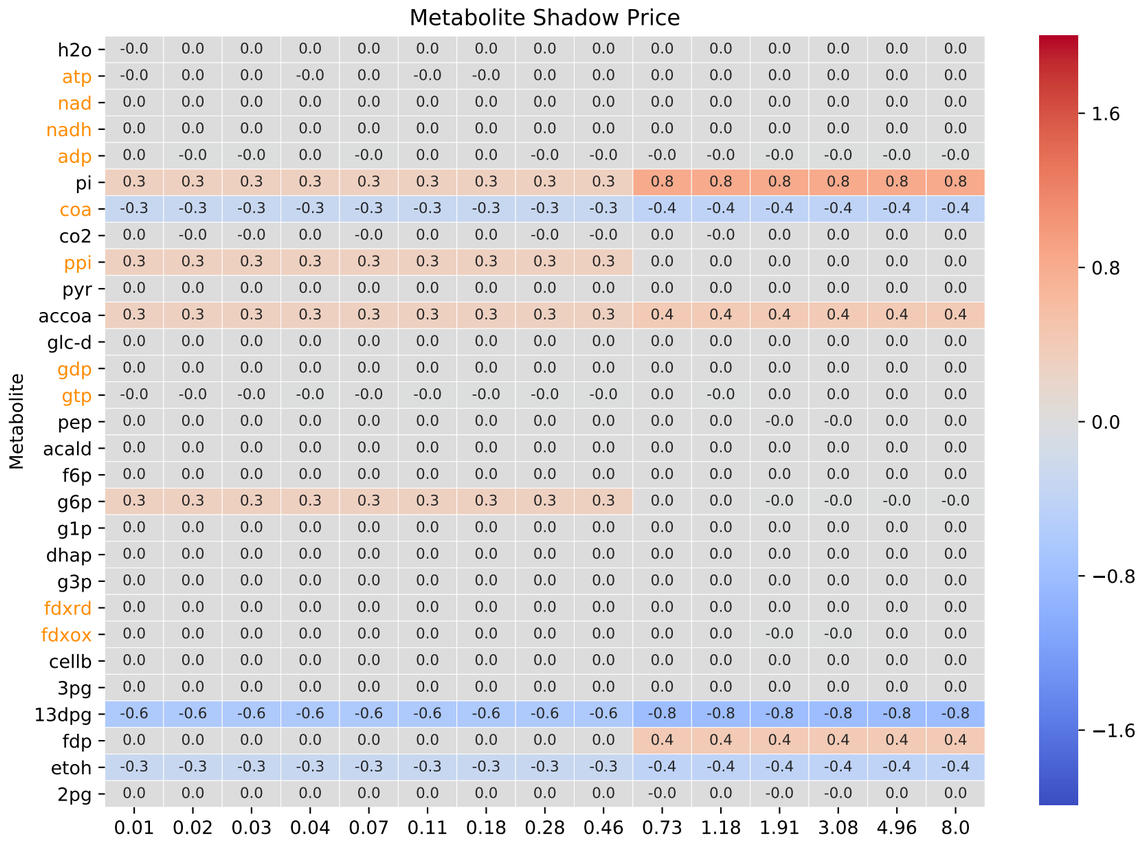












Analysis of flux set: tsac

ΔG0=-361.00
3 ADP + 3 Orthophosphate + Cellobiose = 2 H2O + 3 ATP + 4 CO2 + 4 Ethanol