a All pathways

regulated (N = 204)

not regulated (N = 159)

$P_{ranksum} < 0.5$

x-axis: $|log(\Gamma)|$

y-axis: Cumulative distribution

b Central Carbon Metabolism

regulated (N = 26)

not regulated (N = 17)

$P_{ranksum} < 0.8$

x-axis: $|log(\Gamma)|$

c Measured metabolite conc.

x-axis: $[S]$ (in mM)

y-axis: Cumulative distribution

d Measured K_S values

$p_{ranksum} < 0.005$

substrates (N = 145)

inhibitors (N = 35)

x-axis: K_S (in mM)

e Saturation levels

substrates (N = 3320)

inhibitors (N = 798)

75%

44%

$p_{ranksum} < 10^{-72}$

x-axis: $[S]/([S] + K_S)$