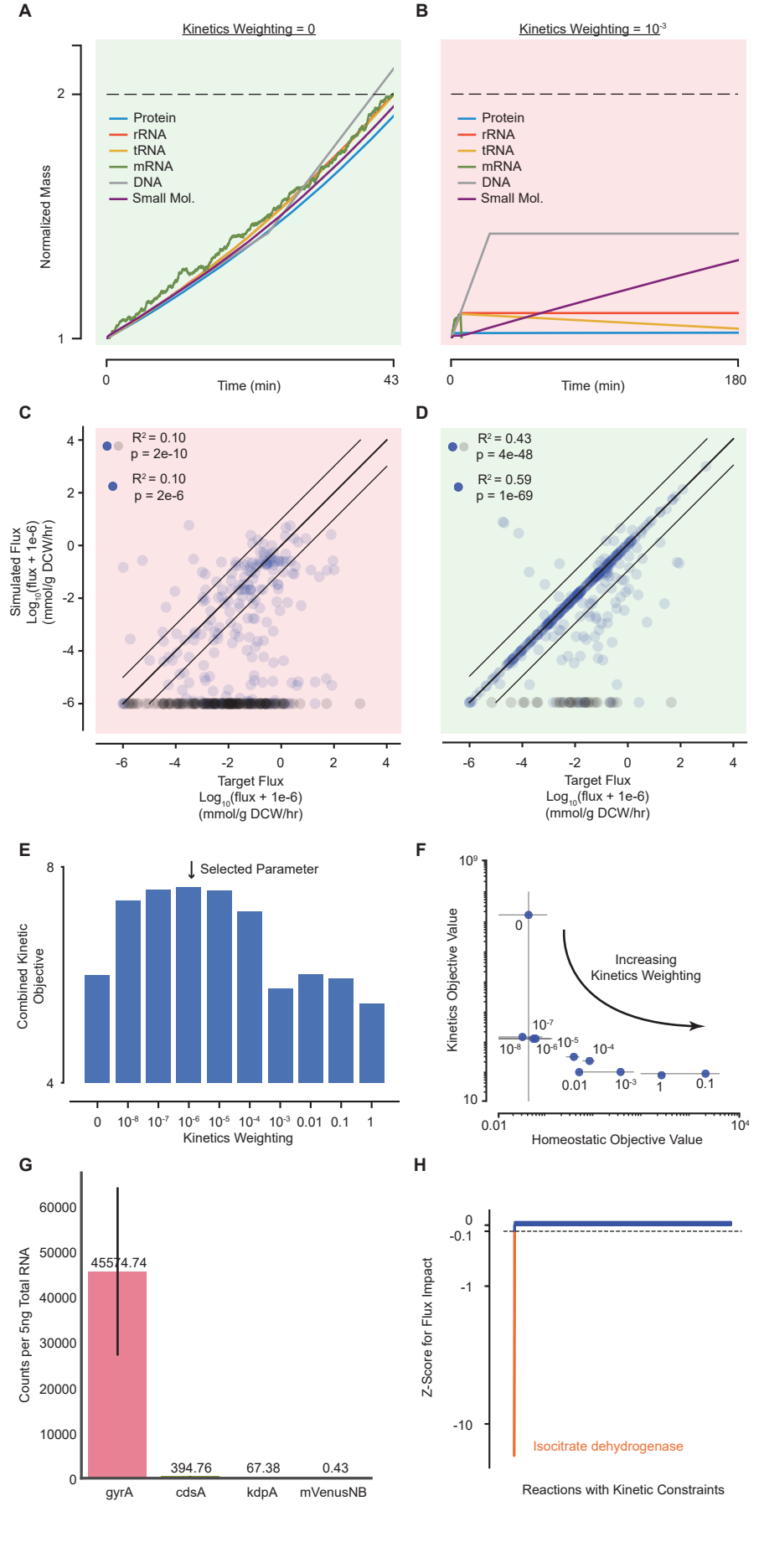
Figure S3


A
Kinetics Weighting = 0
Normalized Mass
2
1
Protein
rRNA
tRNA
mRNA
DNA
Small Mol.
0
43
Time (min)
B
Kinetics Weighting = 10-3
Protein
rRNA
tRNA
mRNA
DNA
Small Mol.
0
180
Time (min)
C
R2 = 0.10
p = 2e-10
R2 = 0.10
p = 2e-6
Simulated Flux
Log10(flux + 1e-6)
(mmol/g DCW/hr)
Target Flux
Log10(flux + 1e-6)
(mmol/g DCW/hr)
D
R2 = 0.43
p = 4e-48
R2 = 0.59
p = 1e-69
Target Flux
Log10(flux + 1e-6)
(mmol/g DCW/hr)
E
Selected Parameter
Combined Kinetic Objective
Kinetics Weighting
F
Kinetics Objective Value
Increasing Kinetics Weighting
Homeostatic Objective Value
G
Counts per 5ng Total RNA
45574.74
394.76
67.38
0.43
gyrA
cdsA
kdpA
mVenusNB
H
Z-Score for Flux Impact
Isocitrate dehydrogenase
Reactions with Kinetic Constraints