

Table S6 Sum of squared error (SE) using different objective functions in predicting intracellular fluxes of *E. coli* (Holm) for three strains

Strains	$J = \sum_{i=1}^m \phi(v_i - z_i) + \ v\ _1$	$J = \sum_{i=1}^m \phi(v_i - z_i)$	$J = \ v - b\ _2$	$J = \ v\ _1$	$J = \ v - b\ _2 + \ v\ _1$
REF	5.1	5.1	5.4	108.3	4.6×10^4
NOX	11.2	11.7	12.0	355.3	4.8×10^4
ATPase	14.1	14.5	14.5	106.2	3.9×10^4
Average	10.1	10.4	10.6	189.3	4.4×10^3