



Supplementary Information for

Redox imbalance links COVID-19 and myalgic encephalomyelitis/chronic fatigue syndrome

Bindu D. Paul^{a,b,c,1}, Marian D. Lemle^d, Anthony L. Komaroff^e, and Solomon H. Snyder^{a,b,c,1}

¹Bindu D. Paul, ¹Solomon H. Snyder;

Email: bpaul8@jhmi.edu;

ssnyder@jhmi.edu

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Figure S1

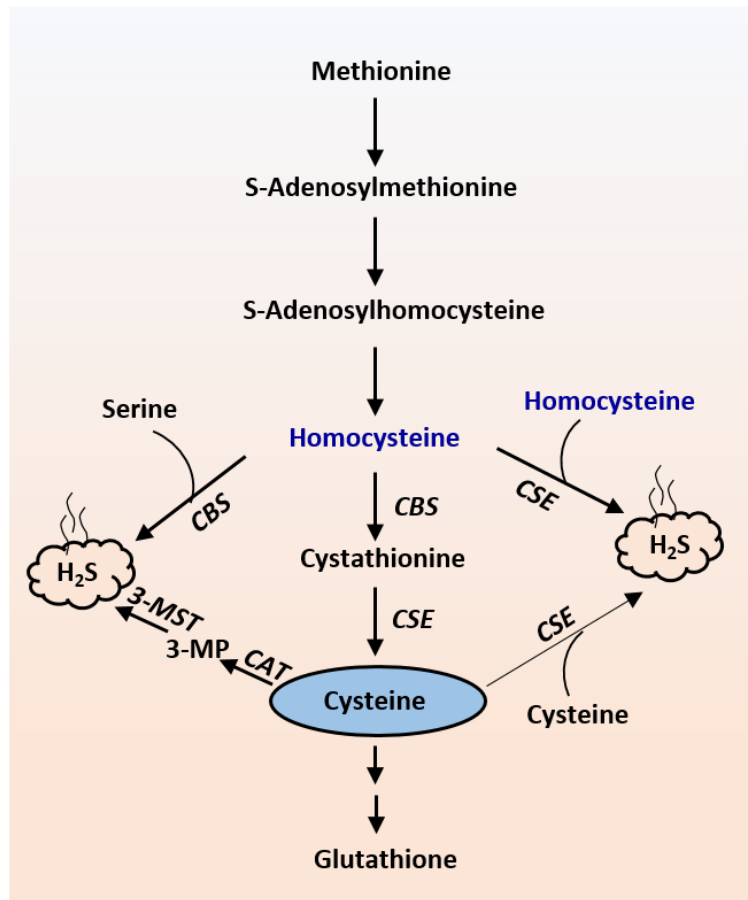


Fig. S1. The reverse transsulfuration pathway. Homocysteine, generated from dietary methionine, is condensed with serine to generate cystathionine by cystathionine β -synthase (CBS). Cystathionine γ -lyase (CSE) acts on cystathionine to produce cysteine. Cysteine can either be utilized to synthesize glutathione and other sulfur containing molecules or used as a substrate to generate hydrogen sulfide (H₂S). Both homocysteine and cysteine may be utilized to produce H₂S. While CSE may produce H₂S from either cysteine or homocysteine, CBS generates H₂S using a combination of cysteine and homocysteine. 3-mercaptopyruvate sulfur transferase (3-MST), in conjunction with cysteine amino transferase (CAT), a third enzyme, also produces H₂S using 3-mercaptopyruvate (3-MP) as a substrate.