Remethylation pathway

Dietary proteins

Methionine

ATP

1

SAM

2

CH_3 → Acceptor molecules

SAH

3

Adenosyl

Homocysteine

5,10-Methylene -THF

4

5-CH_3-THF (B_9)

THF

5

Cobalamins (B_{12})

Serine or Cysteine

6 CBS

Cysta

Pyridoxine (B_6)

7 CSE

Total body pool

Sulfane sulfur bound stores

*H_2S

**H_2S

9 3MST

3MP

Desulfuration pathways

8 CAT

12

10

γ-glutamyl cycle

12

GSSG

GSH

Cys

Cystine

13

11

13

14

Elemental sulfur

Tau

SO_4^{2-}

Transsulfuration pathway