

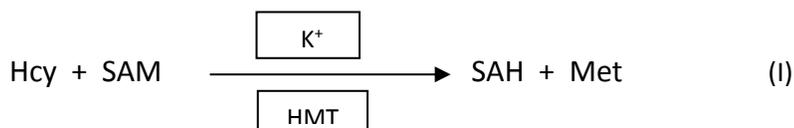
CERTIFICATE OF ANALYSIS

Product: Homocysteine S-methyltransferase (HMT)

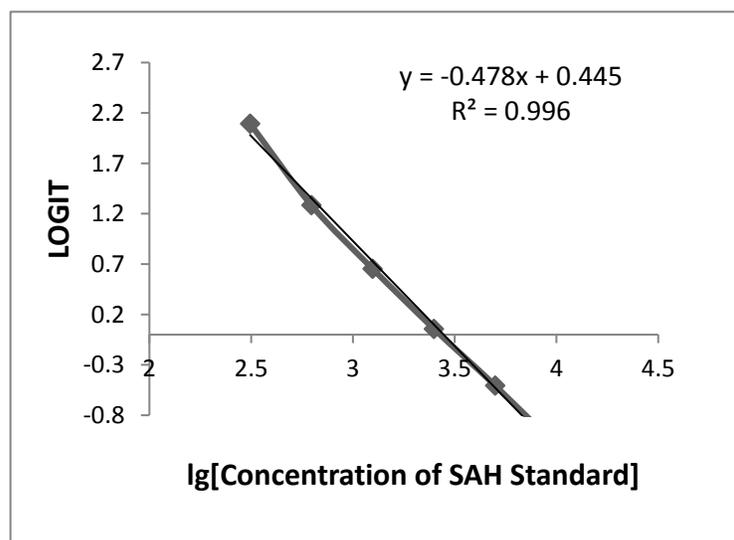
Catalog Number: AST00601

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HMT catalytic reaction in the body is defined to catalyze homocysteine (Hcy) and S-adenosylmethionine (SAM) to generate S-adenosylhomocysteine (SAH) and methionine (Met). Perform competitive ELISA to measure the product of the formula I above, i.e. SAH. The amount of SAH produced reflects the enzymatic activity of HMT. The HMT buffer used: PB with 0.1% BSA, 100mM KCl pH 7.80. The reaction was carried out at 37°C.



LOGIT = $\ln(A/A_{S0}/(1-A/A_{S0}))$, where A_{S0} is OD450 when no antigen was added.

Figure 1 Standard curve of SAH as measured by competitive ELISA.

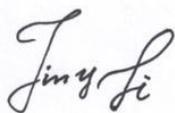
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Table 1 HMT activity from normal hepatocytic cell line L02 (cell lysate)

Substrates	Product SAH (μM)
SAM 5 μM	1.618283
SAM 20 μM	2.718398
SAM 5 μM + Hcy 20 μM	2.694052
SAM 20 μM + Hcy 20 μM	3.724836

The Table 1 indicates that adding SAM or HMT or both at different concentrations led to increased SAH production compared to control baseline SAH. More SAH was produced as increased amount of Hcy or SAM was added and dose-dependent effect was obvious.

Notice: Different experimental conditions or labs may produce different results from the above even if the same batch of HMT is used.



Jimmy Li
Quality Control Team

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