**BACKGROUND**

Betaine-homocysteine methyltransferase (BHMT) is a zinc-dependent cytosolic protein that catalyzes the conversion of betaine and homocysteine to dimethylglycine and methionine, respectively. BHMT is highly expressed in rat liver, and its expression is regulated by dietary methionine and choline. In humans, S-adenosylmethionine (SAM) downregulates BHMT expression by inducing NFκB, which acts as a repressor for the BHMT gene. Lowered BHMT levels can lead to ER (endoplasmic reticulum) stress. Mutations in the gene encoding for BHMT may lead to hyperhomocysteinemia, a medical condition characterized by abnormally large amounts of homocysteine in the blood which may be a risk factor for cardiovascular and cerebrovascular diseases.

**REFERENCES**


**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

**APPLICATIONS**

BHMT (O-24) is recommended for detection of BHMT of mouse, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BHMT siRNA (h): sc-91965, BHMT siRNA (m): sc-141697, BHMT shRNA Plasmid (h): sc-91965-SH, BHMT shRNA Plasmid (m): sc-141697-SH, BHMT shRNA (h) Lentiviral Particles: sc-91965-V and BHMT shRNA (m) Lentiviral Particles: sc-141697-V.

Molecular Weight of BHMT: 45 kDa.


**DATA**

BHMT (O-24): sc-130977. Western blot analysis of BHMT expression in human fetal liver tissue extract.


**STORAGE**

Store at 4° C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

**SOURCE**

BHMT (O-24) is a Protein A purified rabbit polyclonal antibody raised against synthetic BHMT peptide of human origin.