# MAT Iα (h2): 293T Lysate: sc-170529



The Power to Question

#### **BACKGROUND**

Methionine adenosyltransferase (MAT) catalyzes the formation of S-adenosyltransferase (AdoMet) for methionine catabolism in the liver. Two different genes, MAT1A and MAT2A, encode a liver specific and non-liver specific form of MAT, respectively. Inactivation of the liver specific gene product, designated MAT I/III, associates with liver diseases such as cirrhosis. MAT1A expression also correlates with a differentiated phenotype, whereas liver cells expressing MAT2A present a dedifferentiated phenotype and lowered AdoMet synthesis. Likewise, NF $\kappa$ B and TNF $\alpha$  cause a switch from MAT1A to MAT2A expression in human hepatocellular carcinoma (HCC), which facilitates cancer cell growth.

# **REFERENCES**

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# **CHROMOSOMAL LOCATION**

Genetic locus: MAT1A (human) mapping to 10g23.1.

# **PRODUCT**

MAT I $\alpha$  (h2): 293T Lysate represents a lysate of human MAT I $\alpha$  transfected 293T cells and is provided as 100  $\mu g$  protein in 200  $\mu l$  SDS-PAGE buffer.

# **STORAGE**

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

#### **APPLICATIONS**

MAT I $\alpha$  (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive MAT I $\alpha$  antibodies. Recommended use: 10-20  $\mu$ I per lane.

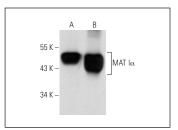
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MAT  $I\alpha/II\alpha$  (B-10): sc-166452 is recommended as a positive control antibody for Western Blot analysis of enhanced human MAT  $I\alpha$  expression in MAT  $I\alpha$  transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

### **DATA**



MAT  $|\alpha/l|\alpha$  (B-10): sc-166452. Western blot analysis of MAT  $|\alpha|$  expression in non-transfected: sc-117752 (**A**) and human MAT  $|\alpha|$  transfected: sc-170529 (**B**) 293T whole cell I wates

# **RESEARCH USE**

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

#### **PROTOCOLS**

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

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