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- Expressversand

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MAT II α (m): 293T Lysate: sc-121527

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, designated MAT I α and MAT II α , respectively. Inactivation of the liver specific gene product, designated MAT I/III, associates with liver diseases such as cirrhosis. MAT I α expression also correlates with a differentiated phenotype, whereas liver cells expressing MAT II α present a dedifferentiated phenotype and lowered AdoMet synthesis. Likewise, NF κ B and TNF α cause a switch from MAT I α to MAT II α expression in human hepatocellular carcinoma (HCC), which facilitates cancer cell growth.

REFERENCES

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- Yang, H., et al. 2003. Induction of human methionine adenosyltransferase 2A expression by tumor necrosis factor α . Role of NF κ B and AP-1. *J. Biol. Chem.* 278: 50887-50896.
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- Kim, J.S., et al. 2005. Methionine adenosyltransferase: adrenergic-cAMP mechanism regulates a daily rhythm in pineal expression. *J. Biol. Chem.* 280: 677-684.
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CHROMOSOMAL LOCATION

Genetic locus: Mat2a (mouse) mapping to 6 C1.

PRODUCT

MAT II α (m): 293T Lysate represents a lysate of mouse MAT II α transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

MAT II α (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive MAT II α antibodies. Recommended use: 10-20 μ l per lane.

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

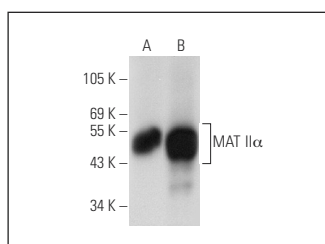
MAT I α /II α (A-10): sc-166183 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse MAT II α expression in MAT II α transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



MAT I α /II α (A-10): sc-166183. Western blot analysis of MAT II α expression in non-transfected: sc-117752 (A) and mouse MAT II α transfected: sc-121527 (B) 293T whole cell lysates.

RESEARCH USE

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