

MAT II β (C-14): sc-83839

BACKGROUND

Methionine adenosyltransferase (MAT) catalyzes the formation of S-adenosyltransferase (AdoMet) for methionine catabolism in the liver. MAT II β (methionine adenosyltransferase II, β), also known as TGR, MAT-II or SDR23E1, is a 334 amino acid protein that is widely expressed and plays an important role in amino acid biosynthesis. Existing as a heterotetramer with two MAT II α subunits, MAT II β functions as a non-catalytic regulatory protein that mediates the activity of MAT II α , specifically by changing the kinetic properties of MAT II α , thereby rendering it more susceptible to inhibition. MAT II β is expressed in hepatoma cells and is thought to play a role in cell proliferation, possibly by increasing the rate of DNA synthesis. Multiple isoforms of MAT II β exist due to alternative splicing events.

REFERENCES

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- LeGros, H.L., et al. 2000. Cloning, expression, and functional characterization of the β regulatory subunit of human methionine adenosyltransferase (MAT II). *J. Biol. Chem.* 275: 2359-2366.
- LeGros, L., et al. 2001. Regulation of the human MAT2B gene encoding the regulatory β subunit of methionine adenosyltransferase, MAT II. *J. Biol. Chem.* 276: 24918-24924.
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- Martínez-Chantar, M.L., et al. 2003. Methionine adenosyltransferase II β subunit gene expression provides a proliferative advantage in human hepatoma. *Gastroenterology* 124: 940-948.
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CHROMOSOMAL LOCATION

Genetic locus: MAT2B (human) mapping to 5q34; Mat2b (mouse) mapping to 11 A5.

SOURCE

MAT II β (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MAT II β of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83839 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

MAT II β (C-14) is recommended for detection of MAT II β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with MAT II.

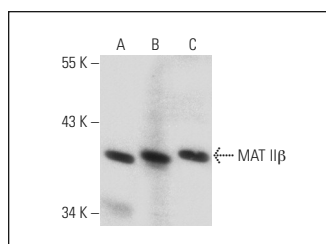
MAT II β (C-14) is also recommended for detection of MAT II β in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MAT II β siRNA (h): sc-75753, MAT II β siRNA (m): sc-75754, MAT II β shRNA Plasmid (h): sc-75753-SH, MAT II β shRNA Plasmid (m): sc-75754-SH, MAT II β shRNA (h) Lentiviral Particles: sc-75753-V and MAT II β shRNA (m) Lentiviral Particles: sc-75754-V.

Molecular Weight of MAT II β : 38 kDa.

Positive Controls: mouse liver extract: sc-2256, human PBL whole cell lysate or c4 whole cell lysate: sc-364186.

DATA



MAT II β (C-14): sc-83839. Western blot analysis of MAT II β expression in c4 (A) and human PBL (B) whole cell lysates and mouse liver tissue extract (C).

STORAGE

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

PROTOCOLS

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


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Try **MAT II β (A-3): sc-390586** or **MAT II β (H-4): sc-514069**, our highly recommended monoclonal alternatives to MAT II β (C-14).