

MAT II β (Y-18): sc-83842

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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CHROMOSOMAL LOCATION

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

SOURCE

MAT II β (Y-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-83842 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MAT II β (Y-18) 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), 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 (Y-18) is also recommended for detection of MAT II β in additional species, including equine, canine, bovine and porcine.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.



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 (Y-18).