

CMAS (H-264): sc-134619

BACKGROUND

CMAS (cytidine monophosphate N-acetylneuraminic acid synthetase), also known as CMP-NeuNAc synthetase or CMP-sialic acid synthetase, is a ubiquitously expressed 434 amino acid protein involved in sialic acid metabolism. Localizing to the nucleus, the evolutionarily conserved enzyme CMAS functions as a homotetramer and catalyzes the production of cytidine 5'-monophosphate N-acetylneuraminic acid (CMP-NeuNAc) from N-acetylneuraminic acid and CTP. The generation of CMP-NeuNAc is an important reaction because CMP-NeuNAc is an essential donor substrate used by sialyltransferases for the addition of sialic acid to hydroxyl groups at the terminal end of glycoproteins, polysaccharides and glycolipids. Proteins with this post-translational modification play an important role in the development, structure and function of animal tissues.

CHROMOSOMAL LOCATION

Genetic locus: CMAS (human) mapping to 12p12.1; Cmas (mouse) mapping to 6 G3.

SOURCE

CMAS (H-264) is a rabbit polyclonal antibody raised against amino acids 26-289 mapping near the N-terminus of CMAS of human origin.

PRODUCT

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

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.

APPLICATIONS

CMAS (H-264) is recommended for detection of CMAS of mouse, rat and human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CMAS (H-264) is also recommended for detection of CMAS in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CMAS siRNA (h): sc-95844, CMAS siRNA (m): sc-142409, CMAS shRNA Plasmid (h): sc-95844-SH, CMAS shRNA Plasmid (m): sc-142409-SH, CMAS shRNA (h) Lentiviral Particles: sc-95844-V and CMAS shRNA (m) Lentiviral Particles: sc-142409-V.

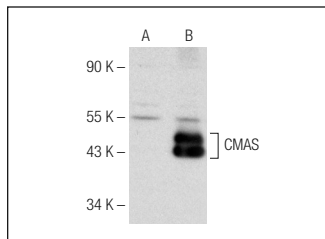
Molecular Weight of CMAS: 48 kDa.

Positive Controls: CMAS (m): 293T Lysate: sc-119320, K-562 nuclear extract: sc-2130 or HeLa whole cell lysate: sc-2200.

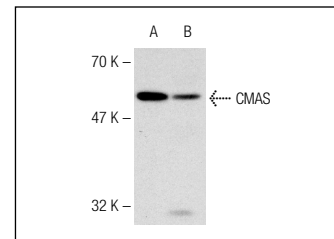
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CMAS (H-264): sc-134619. Western blot analysis of CMAS expression in non-transfected: sc-117752 (A) and mouse CMAS transfected: sc-119320 (B) 293T whole cell lysates.



CMAS (H-264): sc-134619. Western blot analysis of CMAS expression in K-562 nuclear extract (A) and HeLa whole cell lysate (B).

PROTOCOLS

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



Try **CMAS (E-8): sc-398296** or **CMAS (14W): sc-100486**, our highly recommended monoclonal alternatives to CMAS (H-264).