

CMAS Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CMAS. Catalog # AT1566a

Specification

CMAS Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, IHC, IF, E <u>Q8NFW8</u> <u>NM_018686</u> Human, Mouse, Rat mouse Monoclonal IgG2a Kappa 48379

CMAS Antibody (monoclonal) (M01) - Additional Information

Gene ID 55907

Other Names N-acylneuraminate cytidylyltransferase, CMP-N-acetylneuraminic acid synthase, CMP-NeuNAc synthase, CMAS

Target/Specificity CMAS (NP_061156, 164 a.a. ~ 263 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A

Format Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions CMAS Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

CMAS Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.



- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CMAS Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to CMAS on HeLa cell. [antibody concentration 10 ug/ml]



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .





CMAS monoclonal antibody (M01), clone 5A2. Western Blot analysis of CMAS expression in PC-12 ((Cat # AT1566a)



CMAS monoclonal antibody (M01), clone 5A2 Western Blot analysis of CMAS expression in Hela S3 NE ((Cat # AT1566a)



CMAS monoclonal antibody (M01), clone 5A2. Western Blot analysis of CMAS expression in Raw 264.7 ((Cat # AT1566a)





CMAS monoclonal antibody (M01), clone 5A2. Western Blot analysis of CMAS expression in NIH/3T3 ((Cat # AT1566a)



Immunoperoxidase of monoclonal antibody to CMAS on formalin-fixed paraffin-embedded human salivary gland. [antibody concentration 3 ug/ml]



 $\label{eq:constraint} Detection \ limit \ for \ recombinant \ GST \ tagged \ CMAS \ is \ approximately \ lng/ml \ as \ a \ capture \ antibody.$

CMAS Antibody (monoclonal) (M01) - Background

The enzyme encoded by this gene catalyzes the activation of Neu5Ac to Cytidine 5-prime-monophosphate N-acetylneuraminic acid (CMP-Neu5Ac), which provides the substrate required for the addition of sialic acid. Sialic acids of cell surface glycoproteins and glycolipids play a pivotal role in the structure and function of animal tissues. The pattern of cell surface sialylation is highly regulated during embryonic development, and changes with stages of differentiation. Studies of a similar murine protein suggest that this protein localizes to the nucleus.

CMAS Antibody (monoclonal) (M01) - References

A C-terminal phosphatase module conserved in vertebrate CMP-sialic acid synthetases provides a



tetramerization interface for the physiologically active enzyme. Oschlies M, et al. J Mol Biol, 2009 Oct 16. PMID 19666032.The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039.Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.Notl flanking sequences: a tool for gene discovery and verification of the human genome. Kutsenko AS, et al. Nucleic Acids Res, 2002 Jul 15. PMID 12136098.