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CMAS Antibody (monoclonal) (M01)

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

Product Information

Application	WB, IHC, IF, E
Primary Accession	Q8NFW8
Other Accession	NM_018686
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	5A2
Calculated MW	48379

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.

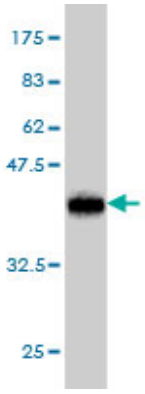
Background

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.

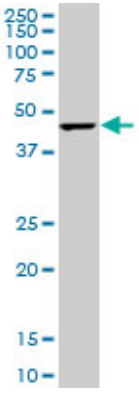
References

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.NotI 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.

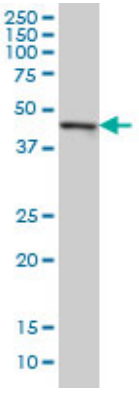
Images



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

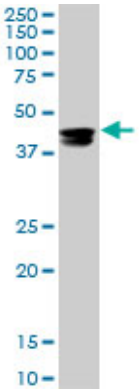


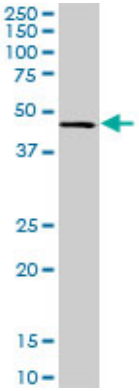
CMAS monoclonal antibody (M01), clone 5A2. Western Blot analysis of CMAS expression in PC-12 ((Cat # AT1566a)



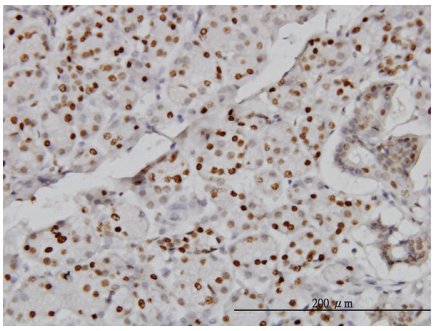
CMAS monoclonal antibody (M01), clone 5A2 Western Blot analysis of CMAS expression in Hela S3 NE ((Cat # AT1566a)

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

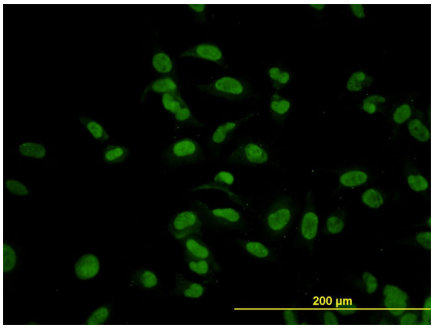




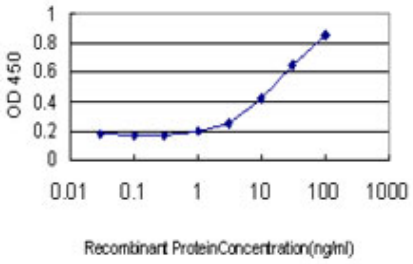
CMAS monoclonal antibody (M01), clone 5A2. Western Blot analysis of CMAS expression in NIH/3T3 ((Cat # AT1566a)



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



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



Detection limit for recombinant GST tagged CMAS is approximately 1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.