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NANS Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant NANS.
Catalog # AT2971a

Product Information

Application	WB, E
Primary Accession	Q9NR45
Other Accession	NM_018946
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3G6
Calculated MW	40308

Additional Information

Gene ID	54187
Other Names	Sialic acid synthase, N-acetylneuraminate synthase, N-acetylneuraminate-9-phosphate synthase, N-acetylneuraminic acid phosphate synthase, N-acetylneuraminic acid synthase, NANS, SAS
Target/Specificity	NANS (NP_061819, 260 a.a. ~ 359 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 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	NANS Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

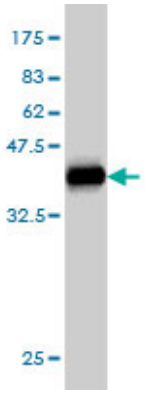
Background

This gene encodes an enzyme that functions in the biosynthetic pathways of sialic acids. In vitro, the encoded protein uses N-acetylmannosamine 6-phosphate and mannose 6-phosphate as substrates to generate phosphorylated forms of N-acetylneuraminic acid (Neu5Ac) and 2-keto-3-deoxy-D-glycero-D-galacto-nononic acid (KDN), respectively; however, it exhibits much higher activity toward the Neu5Ac phosphate product. In insect cells, expression of this gene results in Neu5Ac and KDN production. This gene is related to the E. coli sialic acid synthase gene neuB, and it can partially restore sialic acid synthase activity in an E. coli neuB-negative mutant.

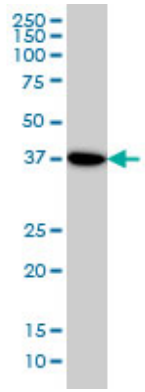
References

Solution structure of the antifreeze-like domain of human sialic acid synthase. Hamada T, et al. Protein Sci, 2006 May. PMID 16597820.Cloning, expression, and characterization of sialic acid synthases. Hao J, et al. Biochem Biophys Res Commun, 2005 Dec 23. PMID 16274664.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.DNA sequence and analysis of human chromosome 9. Humphray SJ, et al. Nature, 2004 May 27. PMID 15164053.Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039.

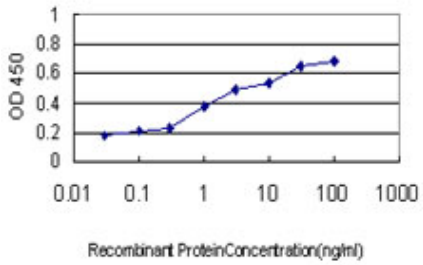
Images



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



NANS monoclonal antibody (M01), clone 3G6 Western Blot analysis of NANS expression in HeLa ((Cat # AT2971a)



Detection limit for recombinant GST tagged NANS is approximately 0.03ng/ml as a capture antibody.

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