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NANS Antibody (monoclonal) (M01)

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

Specification

NANS Antibody (monoclonal) (M01) - Product Information

Application	**WB, E**
Primary Accession	Q9NR45
Other Accession	NM_018946
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a Kappa**
Calculated MW	**40308**

NANS Antibody (monoclonal) (M01) - 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.

NANS Antibody (monoclonal) (M01) - Protocols

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

- Western Blot
- Blocking Peptides

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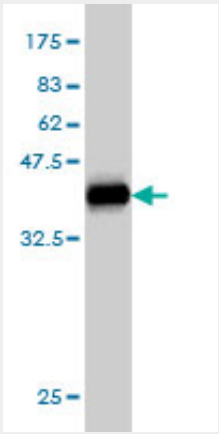
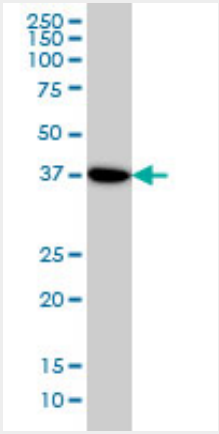
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

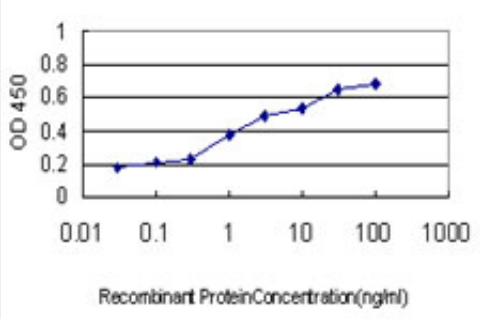
NANS Antibody (monoclonal) (M01) - Images



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.

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NANS Antibody (monoclonal) (M01) - 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.

NANS Antibody (monoclonal) (M01) - 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.