10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NANS Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57352

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9NR45
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40308
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NANS
Epitope Specificity	1-100/359
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 AFP-like domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	54187
Other Names	Sialic acid synthase, N-acetylneuraminate synthase, 2.5.1.56, N-acetylneuraminate-9-phosphate synthase, 2.5.1.57, N-acetylneuraminic acid phosphate synthase, N-acetylneuraminic acid synthase, NANS, SAS
Target/Specificity	Ubiquitous.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NANS (HGNC:19237)
Synonyms	SAS
Function	Catalyzes the condensation of phosphoenolpyruvate (PEP) and N-acetylmannosamine 6-phosphate (ManNAc-6-P) to synthesize N-acetylneuraminate-9-phosphate (Neu5Ac-9-P) (PubMed:10749855). Also catalyzes the condensation of PEP and D-mannose 6-phosphate (Man-6-P) to produce 3-deoxy-D-glycero-beta-D-galacto-non-2-ulopyranosonate 9-phosphate (KDN-9-P) (PubMed:10749855). Neu5Ac-9-P and KDN-9-P are the phosphorylated forms of sialic acids N-acetylneuraminic acid (Neu5Ac) and deaminoneuraminic acid (KDN), respectively (PubMed:10749855). Required for brain and skeletal development (PubMed:27213289).
Tissue Location	Ubiquitous..