

## Product datasheet for **TP300123**

### **NANS (NM\_018946) Human Recombinant Protein**

#### **Product data:**

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human N-acetylneuraminic acid synthase (NANS), 20 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone  
or AA Sequence:** >RC200123 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MPLELELCPGRWVGGQHPCFIIAEIGQNHQGDLDVAKRMIRMAKECGADCAKFQKSELEFKFNKALERP  
YTSKHSWGKTYGEHKRHLEFSDQYRELQRYAEEVGIFFASGMDMAVEFLHELNVPPFFKVGSGDTNNF  
PYLEKTAKKGRPMVISSGMQSMMDTMKQVYQIVKPLNPNFCFLQCTSAYPLQPEDVNLRVISEYQKLFDPDI  
PIGYSGHETGIAISVAVALGAKVLERHITLTKWKGSDHSASLEPGELAELVRSVRLVERALGSPTKQL  
LPCEMACNEKLGKSVAKVKIPEGTILTMMLTVKVGEPKGYPPEDIFNLVGGKVLVTVVEEDDTIMEELV  
DNHGKIKS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Tag:** C-Myc/DDK

**Predicted MW:** 40.1 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_061819](#)

**Locus ID:** 54187



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UniProt ID: [Q9NR45](#)

RefSeq Size: 1257

Cytogenetics: 9q22.33

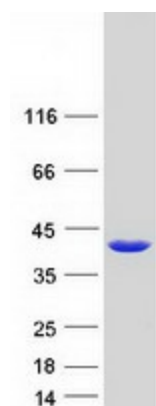
RefSeq ORF: 1077

Synonyms: HEL-S-100; SAS; SEMDCG; SEMDG

**Summary:** 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]

**Protein Pathways:** Amino sugar and nucleotide sugar metabolism, Metabolic pathways

### Product images:



Coomassie blue staining of purified NANS protein (Cat# TP300123). The protein was produced from HEK293T cells transfected with NANS cDNA clone (Cat# [RC200123]) using MegaTran 2.0 (Cat# [TT210002]).