

Product information

NANS, 1-359 aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP0784

Full Name: Sialic acid synthase

NCBI Accession No.: NP_061819

Synonyms: SAS, N acetylneuraminase

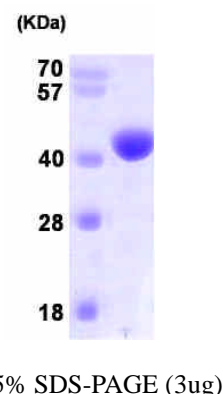
Description: NANS, also known as SAS, is a 359 amino acid protein that contains one AFP (antifreeze proteins)-like domain and functions in the biosynthesis of sialic acids. Expressed ubiquitously, NANS enzymatically catalyzes the H₂O-dependent formation of N-acetylneuraminic acid (Neu5Ac) and 2-keto-3-deoxy-D-glycero-D-galactononic acid (KDN), both of which are sialic acids. NANS uses N-acetylmannosamine 6-phosphate as a substrate for Neu5Ac synthesis and mannose 6-phosphate as a substrate for KDN synthesis. Recombinant human NANS protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

Form: Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 0.1M NaCl, 1mM DTT, 10% glycerol

Molecular Weight: 42.4 kDa (379aa) confirmed by MALDI-TOF

Purity: > 95% by SDS - PAGE

Concentration: 0.5 mg/ml (determined by Bradford assay)



Sequences of amino acids:

MGSSHHHHH SSSLVPRGSH MPLELELCPG RWVGGQHPCF IIAEIQNHQ GDLDVAKRMI RMAKECGADC AKFQKSELEF KFNKALERP
 YTSKHSWGKT YGEHKRHLEF SHDQYRELQR YAEVGIFFT ASGMDMAVE FLHELNVPPF KVGSGDTNNF PYLEKTAKKG RPMVSSGMQ
 SMDTMKQVYQ IVKPLNPNFC FLQCTSAYPL QPEDVNLRLV SEYQKLPDI PIGYSGHETG IAISVAVAL GAKVLERHIT LDKTWKGDH
 SASLEPGELA ELVRSVRLVE RALGSPTKQL LPCEMACNEK LGKSVVAKVK IPEGTILTMD MLTVKVGEPK GYPPEIDFNL VGKKVLVTVE
 EDDT IMEELV DNHGKK IKS

General references:

Milstein O., *et al.* (2008) *J Biol Chem.* 283(49):34414-22.

Aldape MJ., *et al.* (2007) *J Infect Dis.* 195(12):1838-45.

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.