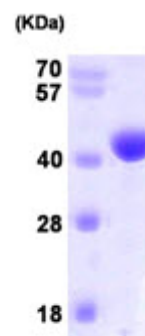


AR09723PU-L

Human NANS (1-359, His-tag) - Purified

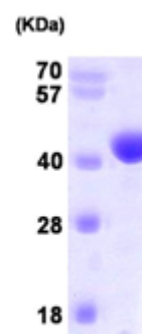
Alternate names:	N-acetylneuraminase synthase, SAS, Sialic acid synthase
Quantity:	0.5 mg
Concentration:	0.5 mg/ml (determined by Bradford assay)
Background:	NANS, also known as SAS, is a 359 amino acid protein that contains one AFP (antifreeze proteins)-like domain and functions in the biosynthesis of sialic acids. Expressed ubiquitously, NANS enzymatically catalyzes the H ₂ O-dependent formation of N-acetylneuraminic acid (Neu5Ac) and 2-keto-3-deoxy-D-glycero-D-galacto-nononic 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.
Uniprot ID:	Q9NR45
NCBI:	NP_061819
GeneID:	54187
Species:	Human
Source:	E. coli
Format:	State: Liquid purified protein Purity: >95% Buffer System: 20 mM Tris-HCl buffer (pH8.0) containing 0.1M NaCl, 1mM DTT, 10% glycerol
Description:	Recombinant human NANS protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques. AA Sequence: MGSSHHHHH SSGLVPRGSH MPLELELCPG RWVGGQHPCF IIAEIGQNHQ GDLDVAKRMI RMAKECGADC AKFQKSELEF KFNKALERP YTSKHSWGKT YGEHCRHLEF SHDQYRELQR YAEVGIFFT ASGMDEMAVE FLHELNPFF KVGSGDTNPF PYLEKTAKKG RPMVISSGMQ SMDTMKQVYQ IVKPLNPFC FLQCTSAYPE QPEDVNLRLV SEYQKLFPI PIGYSGHETG IAISVAAVAL GAKVLERHIT LDKTWKGS DH SASLEPGELA ELVRSVRLVE RALGSPTKQL LPCMACNEK LGKSVVAKVK IPEGTILTMD MLTVKVGE PK GYPPEIDFNL VGKKVLVTVE EDDTIMEELV DNHGKKIKS Molecular weight: 42.4 kDa (379aa) confirmed by MALDI-TOF
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	Milstein O., et al. (2008) J Biol Chem. 283(49):34414-22. Aldape MJ., et al. (2007) J Infect Dis. 195(12):1838-45.

Pictures:



15% SDS-PAGE (3ug)

Recombinant human NANS, 1-359 aa, His-tagged



15% SDS-PAGE (3ug)