NKMAXBio We support you, we believe in your research

Recombinant human NANS protein

Catalog Number: ATGP0784

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-359aa

UniProt No.
Q9NR45

NCBI Accession No.
NP_061819

Alternative Names
Sialic acid synthase, SAS, N acetylneuraminate synthase

PRODUCT SPECIFICATION

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

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 1mM DTT, 10% glycerol

Purity
> 95% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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-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. Recombinant human NANS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Recombinant human NANS protein

Catalog Number: ATGP0784

Amino acid Sequence

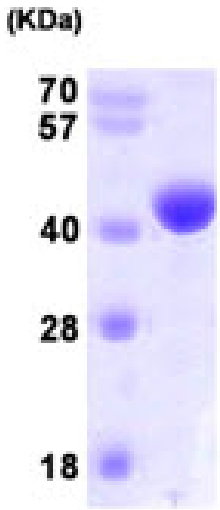
MGSSHHHHHH SSGLVPRGSH MPLELELCPG RWVGGQHPCF IIAEIGQNHQ GDLDVAKRMI RMAKECGADC AKFQKSELEF KFNRKALERP YTSKHSWGKT YGEHKRHLEF SHDQYRELQR YAEEVGIFFT ASGMDEMAVE FLHELNVPFF KVGSGDTNNF PYLEKTAKKG RPMVISSGMQ SMDTMKQVYQ IVKPLNPNFC FLQCTSAYPL QPEDVNLRVI SEYQKLFPDI PIGYSGHETG IAISVAAVAL GAKVLERHIT LDKTWKGSDH SASLEPGELA ELVRSVRLVE RALGSPTKQL LPCEMACNEK LGKSVVAKVK IPEGTILTMD MLTVKVGEPK GYPPEDIFNL VGKKVLVTVE EDDTIMEELV DNHGKKIKS

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.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.