



Recombinant Human Sialic acid synthase (NANS)

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|--------------------------|--|
| Product Code | CSB-EP885699HU-B |
| Abbreviation | NANS |
| Storage | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| Uniprot No. | Q9NR45 |
| Product Type | Recombinant Protein |
| Immunogen Species | Homo sapiens (Human) |
| Purity | ≥85% (SDS-PAGE) |
| Sequence | PLELELCPG RWVGGQHPCF IIAEIGQNHQ GDLDVAKRMI RMAKECGADC AKFQKSELEF KFNKALERP YTSKHSWGKT YGEHKRHLEF SHDQYRELQR YAAEVGIFFT ASGMDEMAVE FLHELNVPPF KVGSGDTNNF PYLEKTAKKG RPMVISSGMQ SMDTMKQVYQ IVKPLNPNFC FLQCTSAYPL QPEDVNLRFI SEYQKLFPI PIGYSGHETG IAISVAVAL GAKVLERHIT LDKTWKGS DH SASLEPGELA ELVRSVRLVE RALGSPTKQL LPCEMACNEK LGKSVAVKV IPEGTILTMD MLTVKVGEPK GYPPEIDIFNL VGKKVLVTVE EDDTIMEELV DNHGKKIKS |
| Source | E.coli |
| Target Names | NANS |
| Protein Names | Recommended name: Sialic acid synthase Alternative name(s): N-acetylneuraminase synthase EC= 2.5.1.56 N-acetylneuraminase-9-phosphate synthase EC= 2.5.1.57 N-acetylneuraminic acid phosphate synthase N-acetylneuraminic aci |
| Expression Region | 2-359 |
| Notes | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| Tag Info | Tag type will be determined during the manufacturing process. |
| Protein Length | Full Length of Mature Protein |
| Target Details | 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. |

**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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