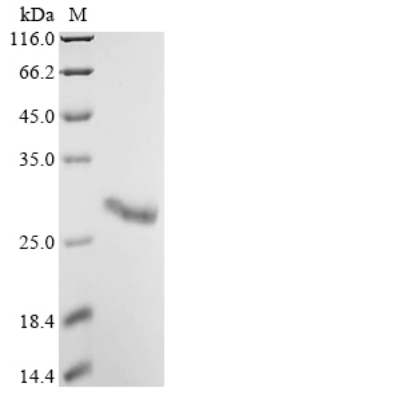
Recombinant Putative N-acetylmannosamine-6-phosphate 2-epimerase (nanE)

Product Code	CSB-YP838038CMB
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.	Q8XNZ3
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Clostridium perfringens (strain 13 / Type A)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MLDVVKGNLIVSCQALSDEPLHSSFIMGRMAIAAKQGGAAAIRAQGVNDINEIKEVTKLPIIGIIKRNYDDSEIYITPTMKEVDELLKTDCEMIALDATKRKRPNGENVKDLVDAIHAKGRLAMADISTLEEGIEAEKLGFDCVSTTLSGYTPYSKQSNSVDFELLEELVKTVKIPVICEGRINTPEELKKALDLGAYSAVVGGAITRPQQITKRFTDILK
Lead Time	Delivery time may differ from different purchasing way or location, please kindly consult your local distributors for specific delivery time.
Research Area	Others
Source	Yeast
Gene Names	nanE
Expression Region	1-221aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal 6xHis-tagged
Mol. Weight	25.7 kDa
Protein Description	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant putative N-acetylmannosamine-6-phosphate 2-epimerase (nanE) is produced using a yeast expression system. The expression construct encodes the full-length nanE protein from Clostridium perfringens, spanning amino acids 1 to 221, and includes a C-terminal 6xHis-tag for purification purposes. The production process involves introducing the expression construct into yeast cells and allowing them to express and synthesize the recombinant nanE protein. The purified recombinant nanE protein exhibits a purity of up to 85%, as determined by SDS-PAGE analysis. On the gel, the nanE protein migrates as a band with an approximate molecular weight of 28 kDa.

nanE mainly catalyzes the conversion of N-acetylmannosamine-6-phosphate (ManNAc-6-P) to N-acetylglucosamine-6-phosphate (GlcNAc-6-P), playing crucial in the biosynthesis of N-acetylneuraminic acid (Neu5Ac), which is an essential component of various cellular structures such as glycoproteins, glycolipids, and polysaccharides.

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?/-80?. Our default final concentration of glycerol is 50%. Customers could use it as reference.