

# Datasheet for ABIN7554014 **GNE Protein (AA 1-722) (His tag)**



## Overview

Quantity:	1 mg
Target:	GNE
Protein Characteristics:	AA 1-722
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GNE protein is labelled with His tag.

## **Product Details**

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Purpose:	Custom-made recombinant GNE Protein expressed in mammalian cells.
Sequence:	MEKNGNNRKL RVCVATCNRA DYSKLAPIMF GIKTEPEFFE LDVVVLGSHL IDDYGNTYRM
	IEQDDFDINT RLHTIVRGED EAAMVESVGL ALVKLPDVLN RLKPDIMIVH GDRFDALALA
	TSAALMNIRI LHIEGGEVSG TIDDSIRHAI TKLAHYHVCC TRSAEQHLIS MCEDHDRILL
	AGCPSYDKLL SAKNKDYMSI IRMWLGDDVK SKDYIVALQH PVTTDIKHSI KMFELTLDAL
	ISFNKRTLVL FPNIDAGSKE MVRVMRKKGI EHHPNFRAVK HVPFDQFIQL VAHAGCMIGN
	SSCGVREVGA FGTPVINLGT RQIGRETGEN VLHVRDADTQ DKILQALHLQ FGKQYPCSKI
	YGDGNAVPRI LKFLKSIDLQ EPLQKKFCFP PVKENISQDI DHILETLSAL AVDLGGTNLR
	VAIVSMKGEI VKKYTQFNPK TYEERINLIL QMCVEAAAEA VKLNCRILGV GISTGGRVNP
	REGIVLHSTK LIQEWNSVDL RTPLSDTLHL PVWVDNDGNC AALAERKFGQ GKGLENFVTL
	ITGTGIGGGI IHQHELIHGS SFCAAELGHL VVSLDGPDCS CGSHGCIEAY ASGMALQREA
	KKLHDEDLLL VEGMSVPKDE AVGALHLIQA AKLGNAKAQS ILRTAGTALG LGVVNILHTM
	NPSLVILSGV LASHYIHIVK DVIRQQALSS VQDVDVVVSD LVDPALLGAA SMVLDYTTRR IY

	Sequence without tag. The proposed Purification-Tag is based on experiences with the
	expression system, a different complexity of the protein could make another tag necessary
	In case you have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> </ul>
	State-of-the-art algorithm used for plasmid design (Gene synthesis).
	This protein is a made-to-order protein and will be made for the first time for your order. Our
	experts in the lab try to ensure that you receive soluble protein.
	If you are not interested in a full length protein, please contact us for individual protein fragments.
	The big advantage of ordering our made-to-order proteins in comparison to ordering custom
	made proteins from other companies is that there is no financial obligation in case the protein
	cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC
Grade:	custom-made
Target Details	
Farget:	GNE
Alternative Name:	GNE (GNE Products)
Background:	Bifunctional UDP-N-acetylglucosamine 2-epimerase/N-acetylmannosamine kinase (UDP-
	GlcNAc-2-epimerase/ManAc kinase) [Includes: UDP-N-acetylglucosamine 2-epimerase
	(hydrolyzing) (EC 3.2.1.183) (UDP-GlcNAc-2-epimerase) (Uridine diphosphate-N-
	acetylglucosamine-2-epimerase), N-acetylmannosamine kinase (EC 2.7.1.60) (ManAc
	kinase)],FUNCTION: Bifunctional enzyme that possesses both UDP-N-acetylglucosamine 2-
	epimerase and N-acetylmannosamine kinase activities, and serves as the initiator of the
	biosynthetic pathway leading to the production of N-acetylneuraminic acid (NeuAc), a critical
	precursor in the synthesis of sialic acids. By catalyzing this pivotal and rate-limiting step in sia

acid biosynthesis, this enzyme assumes a pivotal role in governing the regulation of cell surface sialylation (PubMed:2808337, PubMed:10334995, PubMed:11326336, PubMed:14707127, PubMed:16503651). Sialic acids represent a category of negatively charged sugars that reside on the surface of cells as terminal components of glycoconjugates and mediate important functions in various cellular processes, including cell adhesion, signal transduction, and cellular recognition (PubMed:10334995, PubMed:14707127). {ECO:0000269|PubMed:11326336, ECO:0000269|PubMed:14707127, ECO:0000269|PubMed:16503651, ECO:0000269|PubMed:2808337}.

Molecular Weight:

79.3 kDa

UniProt:

Q9Y223

### **Application Details**

Application Notes:

We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

### Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months