

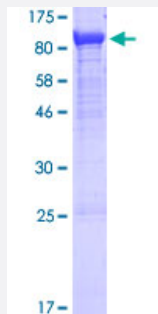
Full-Length

GNE (Human) Recombinant Protein (P01)

Catalog # H00010020-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human GNE full-length ORF (NP_005467.1, 1 a.a. - 722 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MEKNGNNRKLRCVATCNRADYSKLAPIMFGIKTEPEFFELDVVVLGSHLIDDYGNTYRMIEQDDF
DINTRLHTVRGEDEAAMVESVGLALVKLPDVLNRLKPDIMIVHGDRFDALALATSAALMNIRLHIEG
GEVSGTIDDSIRHAITKLAHYHVCCTRSAEQHLISMCEHDHRIILAGCPSYDKLLSAKNKDYMSIIRM
WLGDDVKSKDYVALQHPVTTDIKHSIKMFELTDALISFNKRTLVLFPNIDAGSKEMVRVMRKKGI
EHHPNFRAVKHVPFDQFIQLVAHAGCMIGNSSCGVREVGAFGTPVINLGTRQIGRETGENVLHVR
DADTQDKILQALHLQFGKQYPCSKIYGDGNAVPRILKFLKSIDLQEPLQKKFCFPPVKENISQDIDHI
LETLSALAVDLGGTNLRVAIVSMKGEIVKKYTQFNPKTYEERINLILQMCVEAAAEAVKLNCRILGVG
ISTGGRVNPREGIMLHSTKLIQEWNSVDLRTPLSDTLHLPVWVDNDGNCAALAERKFGQGKGLN
FVTLITGTGIGGGIIHQHELIHGSSFCAAELGHLVVSLDGPDCSCGSHGCIEAYASGMALQREAKKL
HDEDLIIIIEGMSVPKDEAVGALHLIAAKLGNAAQSILRTAGTALGLGVVNILHTMNPSLVILSGV
LASHYHIVKDVIRQQALSSVQDQDVVVSDLVDPALLGAASMVLDTTTRY

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

105.7

Interspecies Antigen Sequence

Mouse (98); Rat (98)

Preparation Method

[in vitro wheat germ expression system](#)

Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — GNE

Entrez GeneID	10020
GeneBank Accession#	NM_005476.3
Protein Accession#	NP_005467.1
Gene Name	GNE
Gene Alias	DMRV, GLCNE, IBM2, NM, Uae1
Gene Description	glucosamine (UDP-N-acetyl)-2-epimerase/N-acetylmannosamine kinase
Omim ID	269921 600737 603824 605820
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is a bifunctional enzyme that initiates and regulates the biosynthesis of N-acetylneuraminic acid (NeuAc), a precursor of sialic acids. It is a rate-limiting enzyme in the sialic acid biosynthetic pathway. Sialic acid modification of cell surface molecules is crucial for their function in many biologic processes, including cell adhesion and signal transduction. Differential sialylation of cell surface molecules is also implicated in the tumorigenicity and metastatic behavior of malignant cells. Mutations in this gene are associated with sialuria, autosomal recessive inclusion body myopathy, and Nonaka myopathy. Alternative splicing of this gene results in transcript variants encoding different isoforms. [provided by RefSeq]

Other Designations

N-acylmannosamine kinase|OTTHUMP00000021370|UDP-N-acetylglucosamine 2-epimerase/N-acetylmannosamine kinase|UDP-N-acetylglucosamine-2-epimerase/N-acetylmannosamine kinase

Pathway

- [Amino sugar and nucleotide sugar metabolism](#)
- [Metabolic pathways](#)

Disease

- [Myositis](#)