

Recombinant human N-Acetyl-D-Glucosamine Kinase/NAGK protein

Catalog Number: ATGP1474

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-344aa

UniProt No.

Q9UJ70

NCBI Accession No.

NP_060037

Alternative Names

N-acetyl-D-glucosamine kinase, GNK, HSA242910, GlcNAc kinase

PRODUCT SPECIFICATION

Molecular Weight

39.8 kDa (367aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 20% glycerol, 200mM NaCl

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

NAGK (N-acetyl-D-glucosamine kinase) belongs to the eukaryotic-type N-acetylglucosamine kinase family. NAGK converts endogenous N-acetylglucosamine (GlcNAc), a major component of complex carbohydrates, from lysosomal degradation or nutritional sources into GlcNAc 6-phosphate. It is a prominent salvage enzyme of amino sugar metabolism in mammals. NAGK has been shown to interact with STK16 and LNX1. Also it has ManNAc kinase activity. Recombinant human NAGK protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

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Amino acid Sequence

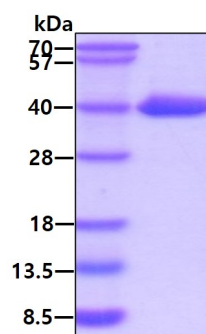
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GSNCRLINPD GSESGCGGWG HMMGDEGSAY WIAHQAVKIV FDSIDNLEAA PHDIGYVKQA MFHYFQVPDR LGILTHLYRD
FDKCRFAGFC RKIAEGAQQG DPLSRYIFRK AGEMLRHIV AVLPEIDPVL FQGKIGLPIL CVGSVWKSWE LLKEGFLAL
TQGREIQAQN FFSSFTLMKL RHSSALGGAS LGARHIGHLL PMDYSANAIA FYSYTFs

General References

Hinderlich S, et al. (2000) Eur J Biochem 267 (11): 3301-8.
Weihofen W.A., et al. (2006) J. Mol. Biol. 364:388-399

DATA

SDS-PAGE



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