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# **Human N-Acetyl-D-Glucosamine Kinase/NAGK antibody**

Catalog Number: ATGA0232

#### **PRODUCT INFORMATION**

## Catalog number

ATGA0232

#### Clone No.

AT4D12

## **Product type**

Monoclonal Antibody

#### **UnitProt No.**

Q9UJ70

#### **NCBI Accession No.**

NP 060037.2

#### **Alternative Names**

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

## **PRODUCT SPECIFICATION**

#### **Antibody Host**

Mouse

#### **Reacts With**

Human

#### Concentration

1mg/ml (determined by BCA assay)

#### **Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

#### **Immunogen**

Recombinant human NAGK (1-344aa) purified from E. coli

#### Isotype

IgG1 kappa

#### **Purification Note**

By protein-G affinity chromatography

### **Application**

ELISA, WB, ICC/IF

#### Usage

The antibody has been tested by ELISA, Western blot and ICC/IF analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

#### **Storage**



## **Human N-Acetyl-D-Glucosamine Kinase/NAGK antibody**

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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**

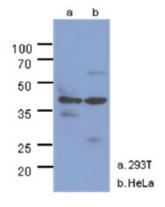
NAGK is a member of the eukaryotic-type N-acetylglucosamine kinase family. NAGK catalyzes the first committed step in arginine biosynthesis in organisms that perform the cyclic pathway of ornithine synthesis. In eukaryotic and bacterial oxygenic phototrophs, the activity of NAGK is controlled by the P (II) signal transduction protein. NAGK converts endogenous N-acetylglucosamine (GlcNAc), a key component of complex carbohydrates, from lysosomal degradation or alimentary sources into GlcNAc 6-phosphate.

#### **General References**

Weihofen WA, Berger M, Chen H, et al. (2007). J. Mol. Biol. 364 (3): 388-99. Weidanz JA, Campbell P, Moore D, et al. (1997). Br. J. Haematol. 95 (4): 645-53. Hinderlich S., et al. (Jul 2000). Eur J Biochem 267 (11): 3301-8.

### **DATA**

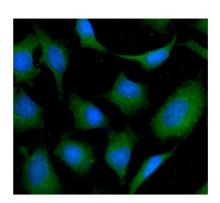
## Western blot analysis (WB)



The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human NAGK antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane a.: 293T cell lysate. Lane b.: HeLa cell lysate.

#### Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of NAGK in HeLa cells. The cell was stained with ATGA0232 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

