

# Human Hexokinase 1/2/3 antibody

Catalog Number: ATGA0495

## PRODUCT INFORMATION

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**Catalog number**

ATGA0495

**Clone No.**

AT4C12

**Product type**

Monoclonal Antibody

**UnitProt No.**

P52790

**NCBI Accession No.**

NP\_002106

**Alternative Names**

EC 2.7.1.1, Hexokinase 3, Hexokinase type III, HK III, HK3, HXK3

## PRODUCT SPECIFICATION

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**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 Hexokinase1,2,3 (1-923aa) purified from E. coli.

**Isotype**

IgG1 kappa

**Purification Note**

By protein-A affinity chromatography

**Application**

ELISA, WB

**Usage**

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

**Storage**

# Human Hexokinase 1/2/3 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

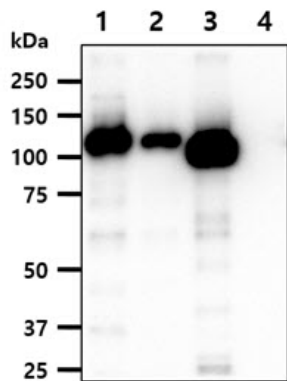
Hexokinase is the first enzyme in the glycolytic pathway, catalyzing the transfer of a phosphoryl group from ATP to glucose to form glucose-6-phosphate and ADP. In mammals, four distinct enzymes-types 1 to 4 hexokinases- have been identified. The enzyme is found in most cells, but there is tissue specificity for the particular type of hexokinase. Hexokinase 3 lacks the hydrophobic N-terminal sequence critical for targeting to mitochondria. Hexokinase 3 may have anabolic functions, providing H6P for glycogen or lipid synthesis.

### General References

Furuta H. et al.,(1996) Genomics. 36(1): 206-9.  
 Jon E. et al., (2003) J.Exp Biology. 206: 2049-2057.

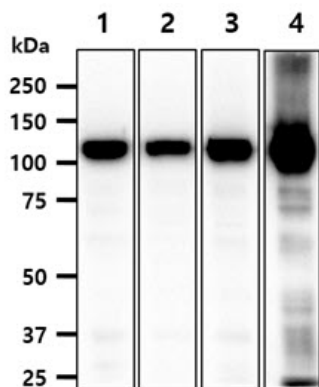
## DATA

### Western blot analysis (WB)



The recombinant protein (20ng) of Hexokinase four isoform were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hexokinase1,2,3 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1 : Recombinant human Hexokinase 1  
 Lane 2 : Recombinant human Hexokinase 2  
 Lane 3 : Recombinant human Hexokinase 3  
 Lane 4 : Recombinant human Hexokinase 4



The cell and tissue lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hexokinase1,2,3 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: HeLa cell lysate  
 Lane 2.: Jurkat cell lysate  
 Lane 3.: K562 cell lysate  
 Lane 4.: Mouse brain tissue lysate