

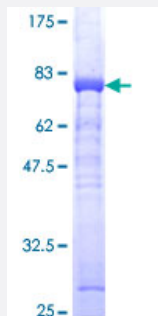
Full-Length

ADK (Human) Recombinant Protein (P01)

Catalog # H00000132-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ADK full-length ORF (AAH03568.1, 1 a.a. - 345 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MTSVRENILFGMGNPLLDISAVVDKDFLDKYSCLKPNDQILAEDKHKELFDELVKKFKVEYHAGGST
QNSIKVAQWMIQQPHKAATFFGCIGIDKFGEILKRKAAEAHVDAHYYEQNEQPTGTCAACITGDNR
SLIANLAAANCYKKEKHLDEKNWMLVEKARVCYAGFFLTVSPESVLKVAHHASENNRIFTLNLS
APFFSQFYKESLMKVMPYVDILFGNETEAATFAREQGFETKDIKEIAKKTQALPKMNSKRQRIVFT
QGRDDTIMATESEVTAFVLDQDQKEIIDTNGAGDAFVGGFLSQLVSDKPLTECIRAGHYAASIIIR
TGCTFPEKPDFH

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

63.58

Interspecies Antigen Sequence

Mouse (91); Rat (90)

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 — ADK

Entrez GeneID[132](#)**GeneBank Accession#**[BC003568.1](#)**Protein Accession#**[AAH03568.1](#)**Gene Name**

ADK

Gene Alias

AK

Gene Description

adenosine kinase

Omim ID[102750](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

This gene encodes adenosine kinase, an abundant enzyme in mammalian tissues. The enzyme catalyzes the transfer of the gamma-phosphate from ATP to adenosine, thereby serving as a regulator of concentrations of both extracellular adenosine and intracellular adenine nucleotides. Adenosine has widespread effects on the cardiovascular, nervous, respiratory, and immune systems and inhibitors of the enzyme could play an important pharmacological role in increasing intravascular adenosine concentrations and acting as anti-inflammatory agents. Alternative splicing results in two transcript variants encoding different isoforms. Both isoforms of the enzyme phosphorylate adenosine with identical kinetics and both require Mg²⁺ for activity. [provided by RefSeq]

Other Designations

OTTHUMP00000019864|OTTHUMP00000019865|adenosine 5'-phosphotransferase

Pathway

- [Metabolic pathways](#)
- [Purine metabolism](#)

Disease

- [Alzheimer Disease](#)
- [Cardiovascular Diseases](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Fatigue](#)
- [Genetic Predisposition to Disease](#)
- [Sleep Disorders](#)
- [Sleep Initiation and Maintenance Disorders](#)
- [Tobacco Use Disorder](#)