

Recombinant Human ADK Protein (His & GST Tag)

Catalog No. PKSH030331

Note: Centrifuge before opening to ensure complete recovery of vial contents.

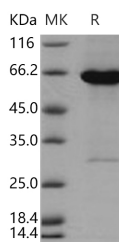
Description

Synonyms	AK
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-His 345
Accession	AAH03568.1
Calculated Molecular Weight	68.0 kDa
Observed molecular weight	60 kDa
Tag	N-His-GST
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as sterile solution of 50mM Tris, 100mM NaCl, pH 8.0, 10% glycerol, 0.3mM DTT
Reconstitution	Not Applicable

Data



> 90 % as determined by reducing SDS-PAGE.

Background

Adenosine kinase(ADK) belongs to the family of transferases. Adenosine kinase (ADK) is the key enzyme in adenosine metabolism and catalyzes ATP and adenosine into two products: ADP and AMP. Two isoforms of the enzyme adenosine kinase (ADK), which differ at their N-terminal ends, are found in mammalian cells. It has been shown that the two ADK isoforms differ only in their first exons and the promoter regions; hence they arise via differential splicing of their first exons with the other exons common to both isoforms. In adult brain, ADK is primarily present in astrocytes. Several lines

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of experimental evidence support a critical role of ADK in different types of brain injury associated with astrogliosis, which is also a prominent morphologic feature of temporal lobe epilepsy (TLE). It has been suggested that dysregulation of ADK in astrocytes is a common pathologic hallmark of TLE. Moreover, in vitro data suggest the existence of an additional layer of modulatory crosstalk between the astrocyte-based adenosine cycle and inflammation. ADK also contributes to CK homeostasis in vivo.

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