



Recombinant Protein Technical Manual
Recombinant Human ADK Protein (His & GST Tag)
RPES0834

Product Data:

Product SKU: RPES0834

Size: 50µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: AAH03568.1

Protein Information:

Molecular Mass: 68 kDa

AP Molecular Mass: 60 kDa

Tag: N-His & GST

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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 50mM Tris, 100mM NaCl, pH 8.0, 10% gly, 0.3mM DTT

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: AK

Immunogen Information:

Sequence: Met 1-His 345

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 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.