

Recombinant Protein Technical Manual

Recombinant Human AK2/Adenylate kinase 2 Protein (His & GST Tag) RPES2557

Product Data:

Product SKU: RPES2557 **Size:** 50μg

Species: Human Expression host: Baculovirus-Insect Cells

Uniprot: P54819

Protein Information:

Molecular Mass: 54.3 kDa

AP Molecular Mass: 50 kDa

Tag: N-His & GST

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ 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 20mM Tris, 500mM NaCl, pH 8.0, 10% gly, 3mM DTT

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

Application:

Synonyms: ADK2;AK2

Immunogen Information:

Sequence: Met 1-Ile 239

Background:

Adenylate kinase 2 (AK2) belongs to the Adenylate kinase family that contains three isozymes: AK1, AK2 and AK3. Adenylate kinases are involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of phosphate groups among adenine nucleotides. Adenylate kinase2 (AK2) is expressed in mitochondrial intermembrane space. It may play a role in apoptosis. It has been demonstrated that in apoptotic cells AK2 was translocated into the cytosol concomitantly with cytochronme C. Mutations in this gene are the cause of reticular dysgenesis. These mutations result in absent or strongly decreased protein expression. It has been also established that AK2 is specifically expressed in the stria vascularis region of the inner ear, which provides an explanation of the sensorineural deafness in these individuals.