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

Catalog Number: PDEH101077

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

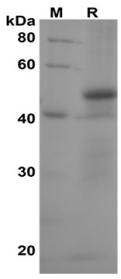
Description

Species	Human
Source	E.coli-derived Human AK2 protein Met1-Ile239, with an N-terminal GST & C-terminal His
Mol_Mass	51.2 kDa
Accession	P54819
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human AK2/Adenylate kinase 2 proteins, 2μg/lane of Recombinant Human AK2/Adenylate kinase 2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 52 KD.

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. ,