Recombinant KAD2 protein (His tag)

Catalog Number	547080
Synonyms	AK 2; ATP-AMP transphosphorylase 2; ATP:AMP phosphotransferase; Adenylate monophosphate kinase
Species	Human
Expression System	E. coli
Accession	P54819
Molecular Weight	Predictes a molecular mass of 28.13 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	1-239
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-239 aa (P54819) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Adenylate Kinase 2 (AK2) Fragment (residues 1-239) is a high-purity, stable protein designed for structural and biochemical studies. This fragment encompasses key functional domains, offering a soluble and active unit ideal for investigating mitochondrial energy metabolism and nucleotide regulation. Adenylate Kinase 2 (AK2) is a mitochondrial enzyme that catalyzes the reversible transfer of a phosphate group between ATP and AMP, playing a critical role in cellular energy homeostasis and adenine nucleotide metabolism. It is localized in the mitochondrial intermembrane space and is essential for hematopoiesis, as evidenced by its involvement in phosphate utilization and AMP biosynthesis pathways. The provided fragment (residues 1-239) represents a computationally optimized, stable region suitable for experimental applications, retaining functional relevance to the full-length protein's activity in energy balance and hematopoietic processes.