Recombinant AT1A2 protein (His tag)

Catalog Number	537801
Synonyms	Na(+)/K(+) ATPase alpha-2 subunit; Sodium pump subunit alpha-2
Species	Human
Expression System	E. coli
Accession	P50993
Molecular Weight	Predictes a molecular mass of 48.63 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	337-769
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 337-769 aa (P50993) 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	Introducing the recombinant Sodium/potassium-transporting ATPase subunit alpha-2 (ATP1A2) fragment (residues 337-769), a high-quality protein product derived from human origin. This fragment is expertly engineered for stability and solubility, making it an ideal tool for structural studies, enzymatic assays, and biochemical research focused on ion transport mechanisms. The full-length Sodium/potassium-transporting ATPase subunit alpha-2 is the catalytic component of the Na+/K+ ATPase enzyme, essential for maintaining electrochemical gradients across the plasma membrane. It catalyzes ATP hydrolysis coupled with sodium and potassium ion exchange, thereby generating the energy required for active nutrient transport and cellular homeostasis. This integral membrane protein is localized to the cell membrane, where it functions as a multi-pass transmembrane protein, playing a critical role in numerous physiological processes.