Recombinant AVPI1 protein (His tag)

Catalog Number	547445
Synonyms	AVP-induced protein 1
Species	Human
Expression System	E. coli
Accession	Q5T686
Molecular Weight	Predictes a molecular mass of 10.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	1-78
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-78 aa (Q5T686) 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 Arginine Vasopressin-Induced Protein 1 (AVP-induced protein 1) fragment (amino acids 1-78) is a high-purity protein designed for structural and biochemical studies. This 78-amino acid fragment, derived from the AVPI1 gene, represents a stable and soluble unit ideal for investigating MAP kinase activation, epithelial sodium channel regulation, and cell cycle mechanisms. Arginine Vasopressin-Induced Protein 1, encoded by the AVPI1 gene in Homo sapiens, is implicated in key cellular processes including MAP kinase pathway activation, down-regulation of epithelial sodium channels (ENaC), and modulation of cell cycling. While its subcellular localization is not fully characterized, this protein's role in signaling and ion transport regulation makes it a significant target for research in cellular physiology and pathophysiology. The provided fragment (residues 1-78) was computationally optimized to ensure solubility and structural integrity, facilitating experimental analysis of its functional domains.