Recombinant VATE2 protein (His tag)

Catalog Number	549051
Synonyms	V-ATPase subunit E 2; Vacuolar proton pump subunit E 2
Species	Human
Expression System	E. coli
Accession	Q96A05
Molecular Weight	Predictes a molecular mass of 27.73 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	1-226
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-226 aa (Q96A05) 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 V-type proton ATPase subunit E 2 (ATP6V1E2) fragment (residues 1-226) is a high-purity, stable protein designed for structural and biochemical studies. This soluble fragment encompasses the full-length domain of the protein, making it ideal for investigating the mechanisms of vacuolar ATPase function and its role in cellular pH regulation. V-type proton ATPase subunit E 2 is a key component of the V1 complex of vacuolar(H+)-ATPase (V-ATPase), a multisubunit enzyme that hydrolyzes ATP to drive proton translocation across membranes. V-ATPase is essential for acidifying intracellular compartments, such as lysosomes and endosomes, and in certain cell types, it localizes to the plasma membrane to acidify the extracellular environment. This enzyme plays a critical role in maintaining pH homeostasis, which is vital for processes like protein degradation, receptor-mediated endocytosis, and bone resorption. The provided fragment represents a stable, soluble unit of the protein, enabling detailed analysis of its structure and function in V-ATPase assembly and activity.