Recombinant ATG9B protein (His tag)

Catalog Number	545182
Synonyms	APG9-like 2; Nitric oxide synthase 3-overlapping antisense gene protein; Protein sONE
Species	Human
Expression System	E. coli
Accession	Q674R7
Molecular Weight	Predictes a molecular mass of 27.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	298-526
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 298-526 aa (Q674R7) 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 Autophagy-related protein 9B (ATG9B) fragment (residues 298-526) from Homo sapiens, a stable and soluble unit optimized for structural and biochemical studies. This fragment supports research on ATG9B's role in autophagosomal membrane expansion and phospholipid scramblase activity, offering a reliable tool for investigating autophagy mechanisms. Autophagy-related protein 9B (ATG9B) is a phospholipid scramblase critical for autophagy, where it mediates autophagosomal membrane expansion by cycling between the preautophagosomal structure and cytoplasmic vesicles. It distributes phospholipids from the cytoplasmic to the luminal leaflet, driving membrane growth, and also contributes to necrotic cell death. Located in the preautophagosomal structure membrane as a multi-pass protein, ATG9B redistributes to a dispersed cytosolic pool under stress conditions like amino acid starvation, dependent on ULK1 and ATG13, highlighting its dynamic role in cellular homeostasis.