Recombinant ARH protein (His tag)

Catalog Number	545147
Synonyms	Autosomal recessive hypercholesterolemia protein
Species	Human
Expression System	E. coli
Accession	Q5SW96
Molecular Weight	Predictes a molecular mass of 18.28 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	38-184
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 38-184 aa (Q5SW96) 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 Low density lipoprotein receptor adapter protein 1 (LDLRAP1) fragment (residues 38-184) is a high-quality, stable protein designed for structural and functional studies. This fragment represents a soluble domain ideal for investigating the molecular mechanisms of LDL receptor endocytosis and clathrin-mediated trafficking. Low density lipoprotein receptor adapter protein 1 (LDLRAP1), also known as Autosomal recessive hypercholesterolemia protein, functions as a clathrin-associated sorting protein (CLASP) essential for efficient endocytosis of the LDL receptor in polarized cells like hepatocytes and lymphocytes. It facilitates LDL binding and internalization by stabilizing receptor interactions with coated pit components and regulates clathrin bud assembly through phosphoinositide binding. The protein also participates in trafficking other LDLR family members, including LRP2, to the endocytic recycling compartment. Subcellular localization studies confirm its presence in the cytoplasm, supporting its role in intracellular trafficking pathways.