Recombinant RIPL1 protein (His tag)

Catalog Number	545126
Synonyms	Rab-interacting lysosomal-like protein 1
Species	Human
Expression System	E. coli
Accession	Q5EBL4
Molecular Weight	Predictes a molecular mass of 31.53 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	1-255
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-255 aa (Q5EBL4) 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 RILP-like protein 1 (RILPL1) fragment (amino acids 1-255) is a high-purity protein designed for studying the RH1 domain. This fragment supports research into cellular transport, polarity regulation, and neuroprotective mechanisms, offering a targeted tool for domain-specific functional analysis. RILP-like protein 1, encoded by the RILPL1 gene, plays a critical role in regulating cell shape, polarity, and protein transport, including processes away from primary cilia. It functions as a neuroprotective protein by sequestering GAPDH in the cytosol, thereby inhibiting its apoptotic activity in the nucleus and competing with SIAH1 for GAPDH binding. Additionally, RILPL1 binds to phosphorylated RAB10 following LRRK2-mediated phosphorylation, leading to inhibition of ciliogenesis. It is localized in the cytosol, centrosome, centriole, and cilium basal body, but does not regulate lysosomal morphology or distribution. This recombinant fragment encompasses the RH1 domain (amino acids 10-97), enabling focused investigation into these specific functional roles.