Recombinant RAPH1 protein (His tag)

Catalog Number	547562
Synonyms	RAPH1; Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 18 protein; Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 9 protein; Lamellipodin; Proline-rich EVH1 ligand 2; PREL-2; Protein RMO1
Species	Human
Expression System	E. coli
Accession	Q70E73
Molecular Weight	Predictes a molecular mass of 34.69 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	244-523
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 244-523 aa (Q70E73) 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 RAPH1 Fragment (244-523): A high-purity protein fragment encompassing the Ras-associating and pleckstrin homology (PH) domains, derived from human Ras-associated and pleckstrin homology domains-containing protein 1. This product is an essential tool for investigating localized membrane signaling, lamellipodial dynamics, and cell adhesion regulation in cellular studies. RAPH1 is a mediator of localized membrane signals implicated in regulating lamellipodial dynamics and negatively controlling cell adhesion. It localizes to the cell membrane, lamellipodia, filopodia, and cytoskeleton, where it is recruited via its PH domain by phosphoinositide PI(3,4)P2. The protein colocalizes with ENAH/VASP at lamellipodial and filopodial tips and interacts with pathogens like Vaccinia and Enteropathogenic E. coli at actin-pathogen interfaces, highlighting its role in membrane-cytoskeleton communication and cellular motility.