Recombinant RFIP3 protein (His tag)

Catalog Number	541852
Synonyms	FIP3; FIP3-Rab11; Rab11-FIP3; Arfophilin-1; EF hands-containing Rab-interacting protein; Eferin; MU-MB-17.148
Species	Human
Expression System	E. coli
Accession	O75154
Molecular Weight	Predictes a molecular mass of 36.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 44 kDa band.

Product Information

Sequence Region	462-756
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 462-756 aa (O75154) 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 Rab11 Family-Interacting Protein 3 (FIP3) Fragment (aa 462-756) - a high-purity protein fragment specifically designed for studying the FIP-RBD domain functionality. This product enables researchers to investigate Rab11 GTPase interactions, endocytic trafficking mechanisms, and intracellular membrane delivery processes with exceptional specificity. Rab11 Family-Interacting Protein 3 (FIP3) serves as a crucial downstream effector molecule for Rab11 GTPase, playing essential roles in multiple cellular processes including endocytic trafficking, cytokinesis, and intracellular ciliogenesis. The full-length protein functions by linking Rab11 to the dynein motor complex, facilitating the movement of peripheral sorting endosomes along microtubule tracks toward the microtubule organizing center. During cell division, FIP3 is implicated in vesicle transport to the cleavage furrow and midbody, delivering membrane components critical for cytokinesis and abscission. Additionally, it participates in the Rab11-Rabin8-Rab8 ciliogenesis cascade by assembling ciliary targeting complexes that direct preciliary vesicle trafficking. The protein localizes to endosome membranes, recycling endosomes, centrosomes, cleavage furrows, midbodies, and Golgi apparatus membranes, dynamically moving between these compartments throughout the cell cycle. This recombinant fragment specifically contains the FIP-RBD domain (aa 694-756), making it an ideal tool for investigating domain-specific interactions and functions.