Recombinant EFA6 protein (His tag)

Catalog Number	532499
Synonyms	Arf guanine nucleotide exchange factor efa-6; Pleckstrin homology domain-containing protein efa-6
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	G5EET6
Gene ID	178217
Molecular Weight	Predictes a molecular mass of 46.53 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	382-774
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 382-774 aa (G5EET6) 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 fragment of the Exchange factor for Arf-6 (efa-6) from Caenorhabditis elegans, encompassing amino acids 382-774. This fragment includes the Pleckstrin homology (PH) domain, making it an ideal tool for investigating domain-specific functions in microtubule dynamics and cellular signaling. The full-length efa-6 protein is a guanine nucleotide exchange factor for Arf-6, playing critical roles in cellular processes such as response to neuronal injury and regulation of microtubule dynamics. It inhibits axon regrowth by promoting microtubule catastrophes and limits microtubule growth near the cellular cortex in embryonic cells. Subcellularly, efa-6 localizes to the cytoplasm, cell cortex, and cell membrane, with dynamic redistribution to sites of microtubule minus-end binding following injury. These functions highlight its importance in cytoskeletal regulation and neuronal repair mechanisms.