Recombinant RPGF4 protein (His tag)

Catalog Number	545581
Synonyms	Exchange factor directly activated by cAMP 2; Exchange protein directly activated by cAMP 2; EPAC 2; cAMP-regulated guanine nucleotide exchange factor II; cAMP-GEFII
Species	Human
Expression System	E. coli
Accession	Q8WZA2
Molecular Weight	Predictes a molecular mass of 20.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	1-167
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 1-167 aa (Q8WZA2) 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 RAPGEF4 (EPAC 2) Fragment (1-167) is a stable, soluble protein fragment designed for structural and biochemical studies. This product represents a key segment of the Rap guanine nucleotide exchange factor 4, a cAMP-activated regulator of RAP GTPases, offering researchers a reliable tool for investigating cAMP-mediated signaling pathways. RAPGEF4, also known as EPAC 2 or cAMP-GEFII, is a guanine nucleotide exchange factor that activates RAP1A, RAP1B, and RAP2A small GTPases upon binding to cAMP. It functions independently of PKA and is involved in cAMP-regulated exocytosis through interactions with RIMS2, playing a critical role in intracellular signaling. The protein is primarily localized in the cytoplasm and associates with the membrane as a peripheral membrane protein, underscoring its importance in membrane-proximal signaling events.