Recombinant RPGF5 protein (His tag)

Catalog Number	543303
Synonyms	Guanine nucleotide exchange factor for Rap1; M-Ras-regulated Rap GEF; MR-GEF; Related to Epac; Repac
Species	Human
Expression System	E. coli
Accession	Q92565
Molecular Weight	Predictes a molecular mass of 40.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	241-580
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 241-580 aa (Q92565) 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	Introducing the recombinant RAPGEF5 protein fragment (241-580), a high-purity tool designed to study the Ras-GEF domain of Rap guanine nucleotide exchange factor 5. This fragment enables targeted investigation into Rap1A, Rap2A, and MRAS/M-Ras-GTP regulation, offering researchers a precise means to explore nucleotide exchange mechanisms in cellular signaling pathways. Rap guanine nucleotide exchange factor 5 (RAPGEF5) is a human protein that functions as a guanine nucleotide exchange factor (GEF) for RAP1A, RAP2A, and MRAS/M-Ras-GTP, facilitating the activation of these small GTPases by promoting GDP to GTP exchange. Notably, its association with MRAS inhibits Rap1 activation, suggesting a complex regulatory role in intracellular signaling. The full-length protein is localized to the nucleus, indicating potential involvement in nuclear processes. This fragment encompasses the critical Ras-GEF domain (345-579), allowing focused study of this functional region without interference from other protein segments.