Recombinant ARHGP protein (His tag)

Catalog Number	540647
Synonyms	Guanine nucleotide exchange factor GEFT; Rac/Cdc42/Rho exchange factor GEFT; RhoA/Rac/Cdc42 guanine nucleotide exchange factor GEFT; p63RhoGEF
Species	Human
Expression System	E. coli
Accession	Q86VW2
Molecular Weight	Predictes a molecular mass of 40.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	149-488
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 149-488 aa (Q86VW2) 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 Rho guanine nucleotide exchange factor 25 (ARHGEF25) fragment (residues 149-488) from Homo sapiens, encompassing the essential DH and PH domains. This high-purity protein is an ideal tool for investigating actin cytoskeleton reorganization, Rho GTPase signaling, and neuronal development in life science research. Rho guanine nucleotide exchange factor 25 (GEFT) functions as a guanine nucleotide exchange factor for Rho family GTPases, including RhoA, Rac1, and Cdc42. It plays a critical role in actin cytoskeleton reorganization, inducing actin stress fiber formation, and links G alpha q/11-coupled receptors to RHOA activation. In neurons, it primarily acts as an exchange factor for RAC1, contributing to axon and dendrite formation, and is involved in skeletal myogenesis. The protein localizes to the cell membrane, cytoplasm, myofibrils, and sarcomeres, with high colocalization in actin-rich regions, underscoring its importance in cellular structure and signaling pathways.