Recombinant SRGP1 protein (His tag)

Catalog Number	545311
Synonyms	srGAP1; Rho GTPase-activating protein 13
Species	Human
Expression System	E. coli
Accession	Q7Z6B7
Molecular Weight	Predictes a molecular mass of 56.93 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 62 kDa band.

Product Information

Sequence Region	1-467
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-467 aa (Q7Z6B7) 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 SLIT-ROBO Rho GTPase-activating protein 1 (srGAP1) fragment (amino acids 1-467) encompassing the complete F-BAR functional domain. This high-purity protein serves as an essential research tool for investigating Rho GTPase regulation and neuronal migration pathways. The full-length SRGAP1 protein functions as a GTPase-activating protein specifically for RhoA and Cdc42 small GTPases. Research indicates that SRGAP1, in conjunction with CDC42, plays a critical role in mediating the repulsive signaling of Robo and Slit proteins during neuronal migration. SLIT2 interaction with ROBO1 enhances SRGAP1's association with ROBO1 and leads to CDC42 inactivation, highlighting its importance in neuronal guidance mechanisms. The provided fragment contains the key functional domains necessary for studying these specific molecular interactions.