Recombinant C42S2 protein (His tag)

Catalog Number	543725
Synonyms	Small effector of CDC42 protein 2
Species	Human
Expression System	E. coli
Accession	Q9NRR3
Molecular Weight	Predictes a molecular mass of 10.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	1-84
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-84 aa (Q9NRR3) 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 CDC42 Small Effector Protein 2 (CDC42SE2) Fragment (aa 1-84) - A high-purity protein fragment encompassing the complete CRIB domain, designed for studying actin cytoskeleton organization and CDC42-mediated signaling pathways in cellular research applications. CDC42 Small Effector Protein 2 is a key regulator of actin cytoskeleton organization that functions downstream of CDC42 to induce actin filament assembly and modulate cell shape changes. In immune cells, it plays critical roles in CDC42-mediated F-actin accumulation at the immunological synapse in activated T-cells and participates in early contractile events during phagocytosis in macrophages. The protein localizes to the cytoplasm, cytoskeleton, and cell membrane through lipid-anchoring, with specific recruitment to the activated TCR prior to actin polymerization and localization at the phagocytic cup in macrophages, highlighting its importance in immune cell function and membrane dynamics.