Recombinant BORG3 protein (His tag)

Catalog Number	547509
Synonyms	Binder of Rho GTPases 3
Species	Human
Expression System	E. coli
Accession	Q6NZY7
Molecular Weight	Predictes a molecular mass of 12.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	1-109
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 1-109 aa (Q6NZY7) 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 effector protein 5 (CDC42EP5) fragment (amino acids 1-109) encompassing the complete CRIB domain. This high-purity protein serves as an essential tool for investigating CDC42-mediated signaling pathways and actin cytoskeleton organization in cellular research applications. Cdc42 effector protein 5, encoded by the CDC42EP5 gene, plays a critical role in organizing the actin cytoskeleton and functions downstream of CDC42 to induce actin filament assembly, leading to significant cell shape changes. The protein demonstrates the ability to induce pseudopodia formation in fibroblasts and independently inhibits MAPK8 activity. Additionally, it controls septin organization, a process negatively regulated by CDC42. Located primarily in the endomembrane system and cytoplasm as a peripheral membrane protein associated with the cytoskeleton, this protein represents a key regulator of cellular architecture and signaling pathways.