Recombinant PP14B protein (His tag)

Catalog Number	550207
Synonyms	Phospholipase C-beta-3 neighbouring gene protein
Species	Human
Expression System	E. coli
Accession	Q96C90
Molecular Weight	Predictes a molecular mass of 17.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	2-147
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 2-147 aa (Q96C90) 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 PPP1R14B Protein Fragment (residues 2-147) is a high-quality, soluble protein designed for structural and biochemical studies. This fragment of Protein phosphatase 1 regulatory subunit 14B (Phospholipase C-beta-3 neighbouring gene protein) retains key functional regions and is optimized for stability, making it ideal for investigating its role as a potent inhibitor of PPP1CA. Protein phosphatase 1 regulatory subunit 14B (PPP1R14B), encoded by the gene PPP1R14B in Homo sapiens, functions as an inhibitor of PPP1CA. Its inhibitory activity is significantly enhanced—over 50-fold—when phosphorylated, highlighting its regulatory importance in cellular signaling pathways. The protein is localized in the cytoplasm, where it likely modulates phosphatase activity to influence key cellular processes. The recombinant fragment (residues 2-147) was selected computationally to ensure solubility and structural integrity, enabling detailed analysis of its inhibitory mechanisms and interactions.