Recombinant IPP2C protein (His tag)

Catalog Number	550327
Synonyms	PPP1R2 family member B; Protein phosphatase 1, regulatory subunit 2 pseudogene 9; Type-1 protein phosphatase inhibitor 4; I-4
Species	Human
Expression System	E. coli
Accession	O14990
Molecular Weight	Predictes a molecular mass of 9.35 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 9 kDa band.

Product Information

Sequence Region	1-71
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 1-71 aa (O14990) 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 PPP1R2C (Protein phosphatase inhibitor 2 family member C) fragment (residues 1-71) is a high-quality protein product designed for structural and biochemical research. This fragment, selected for its stability and solubility, represents a functional unit of the protein phosphatase inhibitor, enabling detailed studies of its regulatory mechanisms. The full-length PPP1R2C protein functions as a protein phosphatase inhibitor, specifically inhibiting the catalytic subunit of PP1 and weakly inhibiting myosin-associated phosphatase activity, as supported by PubMed:11076525. This regulatory role is critical in cellular signaling pathways, where it modulates phosphorylation states to influence processes such as muscle contraction, metabolism, and cell cycle progression. The absence of subcellular location data suggests further investigation is needed to fully characterize its biological context, but its inhibitory function underscores its importance in maintaining cellular homeostasis.