Recombinant PP14C protein (His tag)

Catalog Number	549304
Synonyms	Kinase-enhanced PP1 inhibitor; PKC-potentiated PP1 inhibitory protein; Serologically defined breast cancer antigen NY-BR-81
Species	Human
Expression System	E. coli
Accession	Q8TAE6
Molecular Weight	Predictes a molecular mass of 12.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	77-165
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 77-165 aa (Q8TAE6) 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 Protein phosphatase 1 regulatory subunit 14C (PPP1R14C) fragment (residues 77-165) is a high-purity, soluble protein designed for structural and functional studies. This 89-amino acid fragment, selected for stability and solubility, enables detailed investigation of PP1 inhibition mechanisms relevant to cellular signaling and disease research. Protein phosphatase 1 regulatory subunit 14C (PPP1R14C) functions as a specific inhibitor of the PP1 regulatory subunit PPP1CA, playing a critical role in modulating protein phosphatase activity. Also known as Kinase-enhanced PP1 inhibitor and PKC-potentiated PP1 inhibitory protein, this protein localizes to the cytoplasm and associates with membranes as a peripheral membrane protein, suggesting involvement in spatially regulated signaling pathways. Its function as a PP1 inhibitor positions it as a key regulator of phosphorylation-dependent cellular processes.