Recombinant PPM1B protein (His tag)

Catalog Number	546558
Synonyms	Protein phosphatase 2C isoform beta; PP2C-beta
Species	Human
Expression System	E. coli
Accession	O75688
Molecular Weight	Predictes a molecular mass of 42.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	2-372
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 2-372 aa (O75688) 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 1B (PPM1B) Fragment (residues 2-372) is a high-purity protein tool designed for in-depth study of the PPM-type phosphatase domain. This fragment retains key enzymatic activity, enabling researchers to investigate dephosphorylation mechanisms in signaling pathways such as NF-kappa-B regulation and antiviral responses. Protein Phosphatase 1B (PPM1B), also known as PP2C-beta, is a broad-specificity enzyme encoded by the PPM1B gene in humans. It plays critical roles in cellular signaling by dephosphorylating multiple substrates, including CDK2, CDK6, PRKAA1, PRKAA2, TBK1, and IKBKB/IKKB. Functionally, PPM1B terminates TNF-alpha-mediated NF-kappa-B activation through IKBKB/IKKB dephosphorylation and inhibits TBK1-dependent antiviral signaling. The protein localizes primarily to the cytoplasm and cytosol, with weak membrane association potentially mediated by lipid anchoring. This recombinant fragment (residues 2-372) encompasses the complete PPM-type phosphatase domain (residues 23-295), making it an ideal reagent for domain-specific functional studies.