Recombinant MPIP1 protein (His tag)

Catalog Number	542258
Synonyms	Dual specificity phosphatase Cdc25A
Species	Human
Expression System	E. coli
Accession	P30304
Molecular Weight	Predictes a molecular mass of 24.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	331-524
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 331-524 aa (P30304) 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 CDC25A (M-phase inducer phosphatase 1) Fragment (aa 331-524): A high-purity protein fragment encompassing the Rhodanese domain, engineered for studying domain-specific functions in cell cycle regulation and mitotic progression. CDC25A is a tyrosine protein phosphatase that acts as a dosage-dependent inducer of mitotic progression. It directly dephosphorylates CDK1 and stimulates its kinase activity, and has also been shown to dephosphorylate CDK2 in complex with cyclin-E in vitro. This phosphatase plays a critical role in cell cycle control by activating cyclin-dependent kinases essential for G1/S and G2/M phase transitions. The recombinant fragment (amino acids 331-524) contains the conserved Rhodanese domain (aa 376-482), providing researchers with a targeted tool for investigating domain-specific mechanisms in cell cycle regulation and phosphatase activity.