Recombinant MPIP2 protein (His tag)

Catalog Number	539893
Synonyms	Dual specificity phosphatase Cdc25B
Species	Human
Expression System	E. coli
Accession	P30305
Molecular Weight	Predictes a molecular mass of 26.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	371-580
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 371-580 aa (P30305) 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 CDC25B (M-phase inducer phosphatase 2) Fragment (aa 371-580) - A high-purity protein fragment specifically designed to encompass the complete Rhodanese domain (aa 431-538), providing researchers with an essential tool for studying domain-specific functions of this critical cell cycle regulator. M-phase inducer phosphatase 2 (CDC25B) is a tyrosine protein phosphatase that functions as a dosage-dependent inducer of mitotic progression. It directly dephosphorylates CDK1 and stimulates its kinase activity, making it essential for G2/M phase progression and abscission during cytokinesis in an ECT2-dependent manner. The protein localizes to key cellular structures including the cytoplasm, cytoskeleton, microtubule organizing center, centrosome, and spindle pole, positioning it at critical sites for cell division regulation. The three naturally occurring isoforms exhibit different levels of enzymatic activity, highlighting the importance of studying specific functional domains like the Rhodanese domain contained within this recombinant fragment.