# Recombinant MPIP protein (His tag)

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| **Catalog Number** | 533182 |
| **Synonyms** | Cdc25-like protein; Protein string |
| **Species** | Drosophila melanogaster |
| **Expression System** | E. coli |
| **Accession** | P20483 |
| **Gene ID** | 43466 |
| **Molecular Weight** | Predictes a molecular mass of 28.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band. |

## Product Information

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| **Sequence Region** | 250-479 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >85%, 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 250-479 aa (P20483) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant fragment of Drosophila melanogaster M-phase inducer phosphatase (Cdc25-like protein), encompassing amino acids 250-479. This fragment contains the complete Rhodanese domain, making it an ideal tool for studying domain-specific functions in cell cycle regulation and tyrosine phosphatase activity. The full-length M-phase inducer phosphatase (EC 3.1.3.48) functions as a dosage-dependent inducer in mitotic control and is a tyrosine protein phosphatase required for cell cycle progression. It directly dephosphorylates Cdk1 and activates Cdk1 activity, playing a critical role in regulating the G2/M transition during cell division. As a key regulator of mitosis, this protein is essential for fundamental cellular processes and cell cycle research. |