# Recombinant CDK8 protein (His tag)

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| **Catalog Number** | 532967 |
| **Synonyms** | Cell division protein kinase 8; DmCdk8; Mediator complex subunit Cdk8; Mediator of RNA polymerase II transcription subunit Cdk8 |
| **Species** | Drosophila melanogaster |
| **Expression System** | E. coli |
| **Accession** | Q9VT57 |
| **Gene ID** | 39157 |
| **Molecular Weight** | Predictes a molecular mass of 48.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band. |

## Product Information

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| **Sequence Region** | 1-396 |
| **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 1-396 aa (Q9VT57) 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 Cyclin-dependent kinase 8 (Cdk8) fragment from Drosophila melanogaster, encompassing amino acids 1-396. This fragment includes the complete protein kinase domain, making it an ideal tool for investigating kinase activity, transcriptional regulation, and Mediator complex interactions in biochemical and cellular assays.<br>Cyclin-dependent kinase 8 (Cdk8) is a key component of the Mediator complex, which acts as a coactivator bridge between gene-specific regulatory proteins and the RNA polymerase II transcription machinery. It functions in the regulated transcription of nearly all RNA polymerase II-dependent genes by facilitating the assembly of functional pre-initiation complexes. Cdk8 may phosphorylate the C-terminal domain of RNA polymerase II, potentially inhibiting transcription initiation. The protein is nuclear-localized and is essential for developmental processes such as leg and eye formation and macrochaete specification in Drosophila melanogaster. |