

# Recombinant Human Cyclin-Dependent Kinase 8, GST-tagged

Cat. No. CDK8-1003H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant full-length human CDK8 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>Description</b>	CDK8 is a member of the CDK family which are important regulators of cell cycle progression. CDK8 associates with Cyclin C and is a component of the RNA polymerase II holoenzyme complex that phosphorylates the carboxy-terminal domain (CTD) of the largest subunit of RNA polymerase II. CDK8 regulate transcription by targeting the CDK7/cyclin H subunits of the general transcription initiation factor IIH (TFIIH). Inhibition of CDK8 expression inhibits proliferation in colon cancer cells characterized by high levels of CDK8 and beta-catenin hyperactivity. CDK8 kinase activity is necessary for $\beta$ -catenin-driven transformation and for expression of several $\beta$ -catenin transcriptional targets.
<b>Applications</b>	Kinase Assay; Western Blot
<b>Molecular Weight</b>	84 kDa
<b>Expression System</b>	Sf9 insect cells using baculovirus
<b>Form</b>	Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EDTA, 0.1 mM PMSF, 25 % glycerol.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Purity</b>	> 80 %
<b>Concentration</b>	0.2 ug/ul
<b>Sequences</b>	Full-length
<b>Storage</b>	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
<b>Pathways</b>	Diabetes pathways; Gene Expression; Generic Transcription Pathway; Transcriptional Regulation of White Adipocyte Differentiation

## GENE INFORMATION

<b>Gene Name</b>	CDK8 cyclin-dependent kinase 8 [ Homo sapiens ]
<b>Official Symbol</b>	CDK8
<b>Synonyms</b>	CDK8; cyclin-dependent kinase 8; K35; MGC126074; MGC126075; OTTHUMP00000018158; protein kinase K35; CDK8 protein kinase; mediator complex subunit CDK8; cell division protein kinase 8; mediator of RNA polymerase II transcription subunit CDK8; Cyclin-dependent kinase 8; EC 2.7.11.22; EC 2.7.11.23; Cell division protein kinase 8; Mediator complex subunit CDK8; Mediator of RNA polymerase II transcription subunit CDK8; Protein kinase K35
<b>Gene ID</b>	1024
<b>mRNA Refseq</b>	NM_001260
<b>Protein Refseq</b>	NP_001251

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



<b>MIM</b>	603184
<b>UniProt ID</b>	P49336
<b>Chromosome Location</b>	13q12
<b>Function</b>	ATP binding; RNA polymerase II carboxy-terminal domain kinase activity; cyclin-dependent protein kinase activity; nucleotide binding; protein binding; protein kinase activity

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA