

Recombinant Human Cyclin-Dependent Kinase 8, GST-tagged

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

SPECIFICATION

Product Overview	Recombinant full-length human CDK8 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
Species	Human
Source	Sf9 Cells
Description	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 β -catenin-driven transformation and for expression of several β -catenin transcriptional targets.
Applications	Kinase Assay; Western Blot
Molecular Weight	84 kDa
Expression System	Sf9 insect cells using baculovirus
Form	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.

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Purity	> 80 %
Concentration	0.2 ug/ul
Sequences	Full-length
Storage	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.
Pathways	Diabetes pathways; Gene Expression; Generic Transcription Pathway; Transcriptional Regulation of White Adipocyte Differentiation

GENE INFORMATION

Gene Name	CDK8 cyclin-dependent kinase 8 [Homo sapiens]
Official Symbol	CDK8
Synonyms	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
Gene ID	1024
mRNA Refseq	NM_001260
Protein Refseq	NP_001251

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

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