

## Recombinant Human CDK7, Unactive, GST-tagged

Cat. No. CDK7-1539H Lot. No. (See product label)

### SPECIFICATION

|                         |   |
|-------------------------|---|
| <b>Product Overview</b> | Recombinant full-length human CDK7 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tags.   |
| <b>Species</b>          | Human   |
| <b>Source</b>           | Sf9 Cells   |
| <b>ProteinLength</b>    | Full length   |
| <b>Description</b>      | CDK7 gene is a member of the cyclin-dependent protein kinase family that is important regulators of cell cycle progression. CDK7 forms a trimeric complex with cyclin H and MAT1, which functions as a CDK-activating kinase (CAK). CDK7 is an essential component of the transcription factor TFIIH that is involved in transcription initiation and DNA repair. CDK7 is thought to serve as a direct link between the regulation of transcription and the cell cycle. |
| <b>Form</b>             | Recombinant protein stored in 50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.   |
| <b>Molecular Mass</b>   | ~66 kDa   |
| <b>Purity</b>           | >95%  |
| <b>Applications</b>     | Kinase Assay, Western Blot  |

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| <b>Storage</b>          | Store at $-70^{\circ}\text{C}$ . For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. Avoid freeze/thaw cycles.  |
| <b>Concentration</b>    | 0.1 $\mu\text{g}/\mu\text{l}$  |
| <b>GENE INFORMATION</b> |  |
| <b>Gene Name</b>        | CDK7 cyclin-dependent kinase 7 [ Homo sapiens ]  |
| <b>Official Symbol</b>  | CDK7   |
| <b>Synonyms</b>         | CDK7; cyclin-dependent kinase 7; cyclin dependent kinase 7 (homolog of Xenopus MO15 cdk activating kinase) , cyclin dependent kinase 7 (MO15 homolog, Xenopus laevis, cdk activating kinase); CAK; CAK1; CDKN7; MO15; STK1; p39 Mo15; protein kinase; 39 KDa protein kinase; kinase subunit of CAK; CDK-activating kinase 1; serine/threonine kinase stk1; cell division protein kinase 7; serine/threonine protein kinase 1; serine/threonine-protein kinase 1; serine/threonine protein kinase MO15; homolog of Xenopus MO15 Cdk-activating kinase; TFIIH basal transcription factor complex kinase subunit; cyclin-dependent kinase 7 (MO15 homolog, Xenopus laevis, cdk-activating kinase); HCAK; p39MO15; |
| <b>Gene ID</b>          | 1022   |
| <b>mRNA Refseq</b>      | NM_001799  |
| <b>Protein Refseq</b>   | NP_001790  |
| <b>MIM</b>              | 601955   |
| <b>UniProt ID</b>       | P50613   |

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| <b>Chromosome Location</b> | 5q12.1  |
| <b>Pathway</b>             | Androgen Receptor Signaling Pathway, organism-specific biosystem; B Cell Receptor Signaling Pathway, organism-specific biosystem; Basal transcription factors, organism-specific biosystem; Basal transcription factors, conserved biosystem; Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; Cell cycle, organism-specific biosystem; |
| <b>Function</b>            | ATP binding; DNA-dependent ATPase activity; RNA polymerase II carboxy-terminal domain kinase activity; androgen receptor binding; cyclin-dependent protein kinase activity; nucleotide binding; protein C-terminus binding; protein complex binding; protein kinase activity; transcription coactivator activity;   |

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