



CDK4 peptide (DAG-P0309)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of <i>S. cerevisiae</i> cdc28 and <i>S. pombe</i> cdc2. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in this gene as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of this gene have been reported. [provided by RefSeq, Jul 2008]
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Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily. Contains 1 protein kinase domain.
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	CDK4 cyclin-dependent kinase 4 [Homo sapiens (human)]
Official Symbol	CDK4
Synonyms	CDK4; cyclin-dependent kinase 4; CMM3; PSK-J3; cell division protein kinase 4;
Entrez Gene ID	1019

mRNA Refseq	NM_000075.3
Protein Refseq	NP_000066.1
UniProt ID	P11802
Chromosome Location	12q14
Pathway	ATF-2 transcription factor network, organism-specific biosystem; B Cell Receptor Signaling Pathway, organism-specific biosystem; Bladder cancer, organism-specific biosystem; Bladder cancer, conserved biosystem; Calcineurin-regulated NFAT-dependent transcription in lymphocytes, organism-specific biosystem; Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, conserve
Function	ATP binding; cyclin binding; cyclin-dependent protein serine/threonine kinase activity; protein binding; protein complex binding;