



## Human CDK2 peptide (DAG-P1469)

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

### PRODUCT INFORMATION

<b>Antigen Description</b>	This gene encodes a member of a family of serine/threonine protein kinases that participate in cell cycle regulation. The encoded protein is the catalytic subunit of the cyclin-dependent protein kinase complex, which regulates progression through the cell cycle. Activity of this protein is especially critical during the G1 to S phase transition. This protein associates with and regulated by other subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A), and p27Kip1 (CDKN1B). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014]
<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily. Contains 1 protein kinase domain.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	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

<b>Gene Name</b>	<a href="#">CDK2 cyclin-dependent kinase 2 [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	CDK2
<b>Synonyms</b>	CDK2; cyclin-dependent kinase 2; CDKN2; p33(CDK2); p33 protein kinase; cdc2-related protein kinase; cell division protein kinase 2;

<b>Entrez Gene ID</b>	<a href="#">1017</a>
<b>mRNA Refseq</b>	<a href="#">NM_001290230.1</a>
<b>Protein Refseq</b>	<a href="#">NP_001277159.1</a>
<b>UniProt ID</b>	P24941
<b>Chromosome Location</b>	12q13
<b>Pathway</b>	APC/C-mediated degradation of cell cycle proteins, organism-specific biosystem; Activation of ATR in response to replication stress, organism-specific biosystem; Activation of the pre-replicative complex, organism-specific biosystem; B Cell Receptor Signaling Pathway, organism-specific biosystem; BARD1 signaling events, organism-specific biosystem; CDK-mediated phosphorylation and removal of Cdc6, organism-specific biosystem; Cell Cycle, organism-specific biosystem; Cell Cycle Checkpoints, organ
<b>Function</b>	ATP binding; cyclin binding; cyclin-dependent protein serine/threonine kinase activity; cyclin-dependent protein serine/threonine kinase activity; contributes_to histone kinase activity; metal ion binding; protein binding;