

Recombinant Human CDK2 cell lysate

Cat. No. CDK2-708HCL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human CDK2 / p33 derived in Baculovirus-Insect cells. The whole cell lysate is provided in 1X Sample Buffer. Browse all transfected cell lysate positive controls
Species	Human
Source	Insect Cells
Preparation method	Transfected cells were cultured for 48hrs before collection. The cells were lysed in modified RIPA buffer with cocktail of protease inhibitors. Cell debris was removed by centrifugation and then centrifuged to clarify the lysate. The cell lysate was boiled for 5 minutes in 1 x SDS sample buffer (50 mM Tris-HCl pH 6.8, 12.5% glycerol, 1% sodium dodecylsulfate, 0.01% bromophenol blue) containing 5% b-mercaptoethanol, and lyophilized.
Lysis buffer	Modified RIPA Lysis Buffer: 50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF
Quality control Testing	12.5% SDS-PAGE Stained with Coomassie Blue
Recommended Usage	1. Centrifuge the tube for a few seconds and ensure the pellet at the bottom of the tube. 2. Re-dissolve the pellet using 200µL pure water and boiled for 2-5 min. 3. Store it at -80°C. Recommend to aliquot the cell lysate into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles. Notes: The lysate is ready to load on SDS-PAGE for Western blot application. If dissociating conditions are required, add

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	reducing agent prior to heating.
Stability	Samples are stable for up to twelve months from date of receipt at -80°C
Storage Buffer	50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF
Storage Instruction	Lysate samples are stable for 12 months from date of receipt when stored at -80°C. Avoid repeated freeze-thaw cycles. Prior to SDS-PAGE fractionation, boil the lysate for 5 minutes.

GENE INFORMATION

Gene Name	CDK2 cyclin-dependent kinase 2 [Homo sapiens]
Official Symbol	CDK2
Synonyms	CDK2; cyclin-dependent kinase 2; p33 protein kinase; cell division kinase 2; cdc2-related protein kinase; cell division protein kinase 2; p33(CDK2);
Gene ID	1017
mRNA Refseq	NM_001798
Protein Refseq	NP_001789
MIM	116953
UniProt ID	P24941
Chromosome Location	12q13

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Pathway

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;

Function

ATP binding; cyclin binding; cyclin-dependent protein kinase activity; cyclin-
dependent protein kinase activity; contributes_to histone kinase activity; kinase
activity; metal ion binding; nucleotide binding; protein binding; protein kinase activity;

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