

Technical Data Sheet

Serum Rabbit Anti-Cdk2

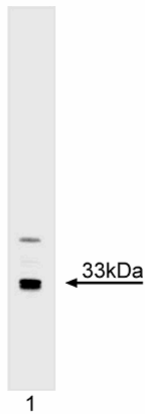
Product Information

Material Number:	558896
Size:	0.1 ml
Clone:	Polyclonal
Immunogen:	Human cdk2 aa. 287-298 synthetic peptide
Isotype:	Rabbit Ig
Reactivity:	QC Testing: Human Reported: Mouse
Target MW:	33 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Cyclins and cyclin-dependent kinases (cdks) are evolutionarily conserved proteins that are essential for cell cycle control in eukaryotes. Cdks are catalytic subunits whose activity requires interaction with their regulatory subunits, the cyclins, as well as specific phosphorylation events. The precise timing of cyclin-cdk activity during the cell cycle determines whether the cell cycle continues or becomes blocked. Cdks 2, 4, 5, and 6 may associate with D-type cyclins. Interaction between cdk2 and cyclin E during G1/S transition creates a complex with histone H1 kinase activity. This complex is thought to be required for the initiation and progression of DNA replication during S phase. Cdk2-cyclin A complexes appear during late S phase and also play a role in progression of DNA replication. Substrates for cdk-cyclin complexes include nuclear lamins, histones, oncogenes, (c-src, c-abl, SV40 large-T), tumor suppressor genes (e.g., RB and p53), nucleolin, RNA polymerase II and others. Cdk2 migrates at ~33 kDa on SDS-PAGE. The polyclonal antibodies recognize human and mouse cdk2. The antibodies do not react with other known cdk proteins. A synthetic peptide corresponding to amino acids 287-298 (QDVTKPVPHLRL) at the C-terminus of human cdk2, with the addition of a C-terminal cysteine residue (C) to facilitate coupling to KLH, was used as immunogen.

The polyclonal antibodies recognize human and mouse cdk2. The antibodies do not react with other known cdk proteins. A synthetic peptide corresponding to amino acids 287-298 (QDVTKPVPHLRL) at the C-terminus of human cdk2, with the addition of a C-terminal cysteine residue (C) to facilitate coupling to KLH, was used as immunogen.



Western blot analysis of Cdk2. Lysate from HeLa human cervical carcinoma cells was probed with anti-CDK2 (Cat. No. 558896). Cdk2 is identified at ~33 kDa.

Preparation and Storage

The polyclonal antibody was purified from antiserum by negative adsorption and affinity chromatography.  
Store undiluted at 4°C.

Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Reported

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit [bdbiosciences.com/how\\_to\\_order/](http://bdbiosciences.com/how_to_order/)

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



**Recommended Assay Procedure:**

Applications include western blot analysis (1:1000). Human cell lines including HeLa cervical carcinoma cells (ATCC CCL-2), 293 embryonic kidney (ATCC CRL-1673), and WI-38 lung fibroblasts (ATCC CCL-75) are suggested as positive controls for these applications.

**Suggested Companion Products**

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
554021	HRP Goat Anti-Rabbit Ig	1.0 ml	(none)
611449	HeLa Cell Lysate	500 µg	(none)

**Product Notices**

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

**References**

Heichman KA, Roberts JM. Rules to replicate by. *Cell*. 1994; 79(4):557-562.(Biology)  
Hunter T, Pines J. Cyclins and cancer. II: Cyclin D and CDK inhibitors come of age. *Cell*. 1994; 79(4):573-582.(Biology)  
Peter M, Herskowitz I. Joining the complex: cyclin-dependent kinase inhibitory proteins and the cell cycle. *Cell*. 1994; 79(2):181-184.(Biology)  
Sherr CJ. G1 phase progression: cycling on cue. *Cell*. 1994; 79(4):551-555.(Biology)  
Xiong Y, Zhang H, Beach D. Subunit rearrangement of the cyclin-dependent kinases is associated with cellular transformation. *Genes Dev*. 1993; 7(8):1572-1583.  
(Immunogen: Immunoprecipitation)  
Zhang H, Xiong Y, Beach D. Proliferating cell nuclear antigen and p21 are components of multiple cell cycle kinase complexes. *Mol Biol Cell*. 1993; 4(9):897-906.  
(Clone-specific: Immunoprecipitation)