

Datasheet for 100-401-161S**cdk2 Antibody****Overview**

Description:	Anti-CDK2 (RABBIT) Antibody - 100-401-161S
Item No.:	100-401-161S
Size:	25 µL
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Anti cdk2 antibody recognizes a protein encoded by a gene member of the Ser/Thr protein kinase family. This protein kinase 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 cyclin-dependent protein kinase complex, whose activity is restricted to the G1-S phase, and essential for cell cycle G1/S phase transition. This protein associates with and regulated by the regulatory subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A) and p27Kip1 (CDKN1B). Its activity is also regulated by its protein phosphorylation. Two alternatively spliced variants and multiple transcription initiation sites of this gene have been reported.
Synonyms:	rabbit anti-Cdk2 Antibody, Cdc2 related protein kinase antibody, Cdk 2 antibody, CDK2 antibody, Cell division kinase 2 antibody, Cell division protein kinase 2 antibody, rabbit anti-Cyclin dependent kinase 2 antibody, p33 protein kinase antibody, cdk
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	CDK2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-cdk2 antibody was prepared from whole rabbit serum by repeated immunizations with a synthetic peptide corresponding to the C-terminus of the human cdk-2 protein conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	Anti-cdk2 antibody was prepared from monospecific antiserum by delipidation and defibrination. Antiserum will specifically react with a 33 kDa cdk2 protein from human, rat and mouse tissue. No reaction was observed against other related cyclin dependent kinases. Cross reactivity with cdk2 from other species may also occur.
Relevant Links:	• NCBI - CAA43985.1 • UniProtKB - Q9BW66 • GeneID - 51550

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-cdk2 antibody has been tested in western blot and immunohistochemistry and is suitable for IF and other antibody based assays. Multiple isoforms as well as phosphorylated forms of cdk-2 may be detected by this antibody. Use paraffin embedded tissues for immunohistochemistry. Optimal titers for other applications should be determined by the researcher.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:1,000 - 1:5,000
IF:	1:200 - 1:1,000
IHC:	1:100
IP:	1:100
WB:	1:200 - 1:1,000

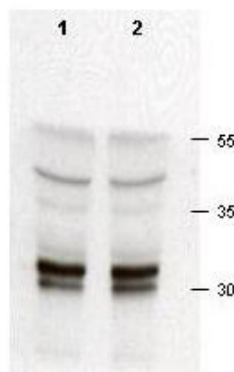
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	80 mg/mL by Refractometry
Buffer:	None
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

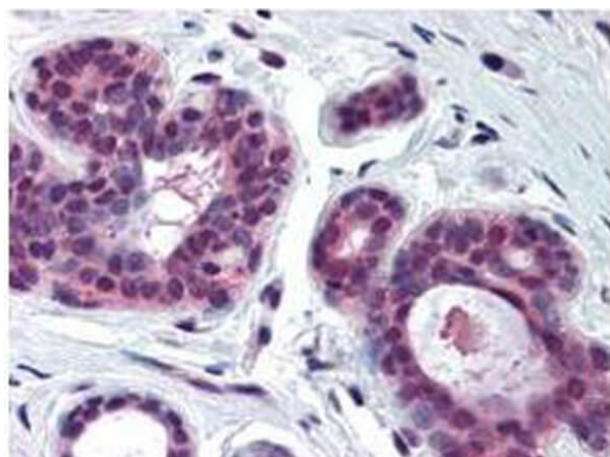
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Rabbit anti-cdk2 was used at a 1:200 dilution to detect cdk-2 in asynchronous HeLa cell lysates (run in duplicate). Approximately 50 µg of lysate was separated on a 15% SDS-PAGE gel. Cdk-2 is indicated by an arrowhead as a 32-33 kDa band. Note that multiple isoforms as well as phosphorylated forms of cdk-2 may be detected by this antibody. Primary antibody was reacted at room temperature for 1 h. After subsequent washing, a 1:5,000 dilution of HRP conjugated Gt-a-Rabbit IgG (611-103-122) preceded color development.



Immunohistochemistry

Immunohistochemistry of Anti-CDK2 antibody. Tissue: human skin formalin fixed and paraffin embedded. No pre-treatment of sample was required. Primary Antibody: Anti-CDK2 was diluted 1:500. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.