

**Datasheet for K912**

# Cyclin Dependent Kinase Antibody Sampler Kit

## Overview

<b>Description:</b>	Cyclin Dependent Kinase Antibody Sampler Kit- K912
<b>Item No.:</b>	K912
<b>Size:</b>	1 Kit
<b>Applications:</b>	IHC, WB
<b>Reactivity:</b>	Human, Mouse, Rat

## Product Details

<b>Background:</b>	The Cyclin Dependent Kinase Antibody Sampler Kit provides an economical means to investigate cdk. The cdk antibody kit allows you to perform western blotting, ELISA, IP and Immunohistochemistry (IHC).
<b>Synonyms:</b>	Anti-cdc2 (p34), Anti-cdk2, Anti-cdk4, Anti-cdk5, Anti-cdk9 (PITALRE), Goat Anti-Rabbit IgG, antibody sample kit, Cyclin dependent kinase antibody

## Target Details

<b>Reactivity:</b>	Human, Mouse, Rat
<b>Purity/Specificity:</b>	Specific Polyclonal Antibodies

## Application Details

<b>Tested Applications:</b>	IHC, WB
<b>Application Note:</b>	Each kit contains one unit of the following products: (100 µL) Anti-cdc2 (p34) (RABBIT) Antibody (100 µL) Anti-cdk2 (RABBIT) Antibody (100 µL) Anti-cdk4 (RABBIT) Antibody (100 µL) Anti-cdk5 (RABBIT) Antibody (100 µL) Anti-cdk9 (PITALRE) (RABBIT) Antibody (100 µg) Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

<b>ELISA:</b>	1:2,000 - 1:10,000
<b>IHC:</b>	User Optimized
<b>IP:</b>	1:100
<b>WB:</b>	1:500 - 1:5,000

## Formulation

**Physical State:** Liquid (sterile filtered)

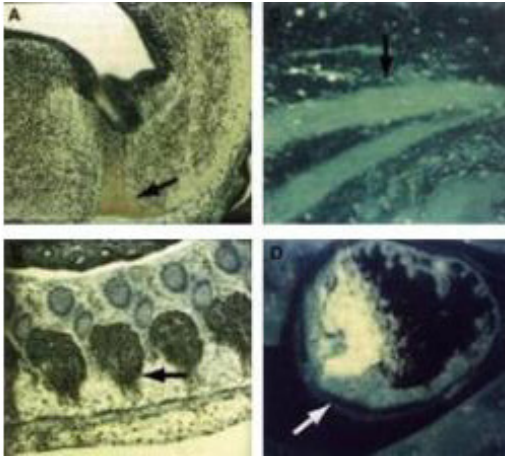
## Shipping & Handling

**Shipping Condition:** Dry Ice

**Storage Condition:** Store antibodies at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



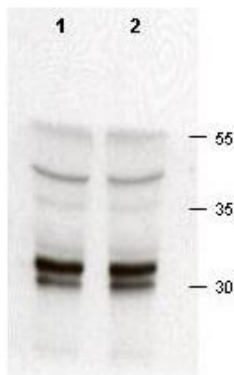
### Immunohistochemistry

Immunocytochemical staining of mouse tissue using anti-cdk9 (PITALRE) antiserum (100-401-167). The staining shows the location of mcdk9/PITALRE protein in developing mouse tissue. Arrows indicate areas of high expression. Panel A: Peroxidase-DAB immunostaining of mcdk9/PITALRE protein in the developing mouse brain in the differentiated region of the medulla oblongata just below the fourth ventricle.

Similar staining is shown in Panel B in the dorsal root ganglia.

Panel C: Fluorescein immunofluorescence of mcdk9/PITALRE in skeletal muscle. Similar staining is shown in Panel D in cardiac muscle.

Other detection systems should yield similar results. Sections from each specimen were cut at 5-7  $\mu$ m, mounted on glass and dried overnight at 37°C. All sections then were deparaffinized in xylene, rehydrated through a graded alcohol series and washed in phosphate-buffered saline (PBS). PBS was used for all subsequent washes and for antiserum dilution. Tissue sections were quenched sequentially in 0.5% hydrogen peroxide and blocked with diluted 10% normal goat anti-rabbit serum. Slides were incubated at 20° C for 1 h with rabbit anti-cdk9 (1:500) dilution, washed, and then reacted with diluted goat anti-rabbit biotinylated antibody for 30 min. All the slides were then reacted with streptavidin-peroxidase conjugate for 30 min at 20° C. Diaminobenzidine was used as the final chromogen and hematoxylin was used as the nuclear counterstain. Negative controls for each tissue section were prepared by substituting the primary antiserum with pre-immune serum.

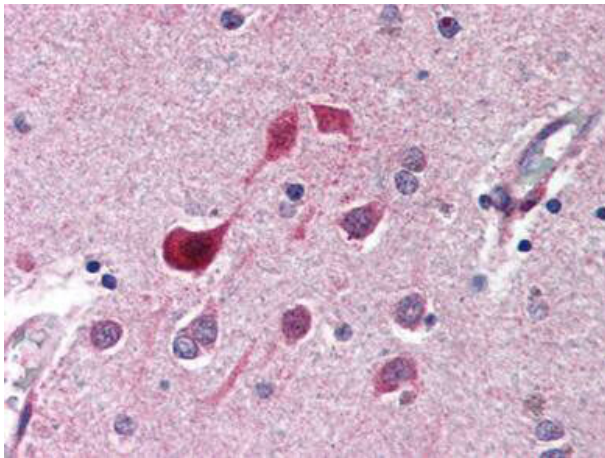


### Western Blot

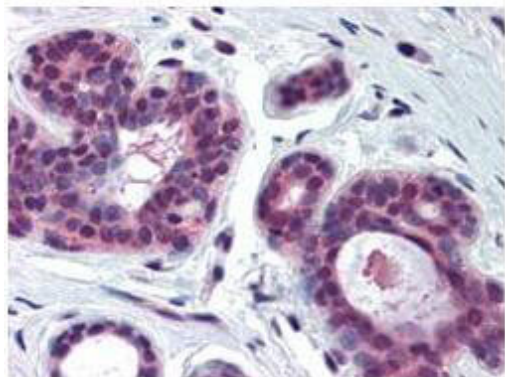
Rabbit anti-cdk2 (100-401-161) was used at a 1:200 dilution to detect cdk-2 in asynchronous HeLa cell lysates (run in duplicate). Approximately 50  $\mu$ g of lysate was separated on a 15% SDS-PAGE gel. Cdk-2 is indicated by an arrowhead as a 32-33 kDa band. Note that multiple isoforms as well as phosphorylated 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.

**Kit Box**

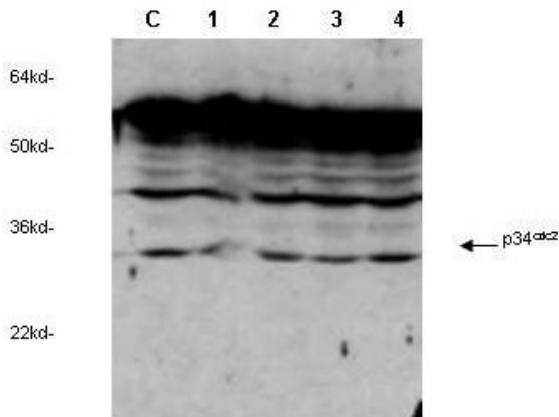
This product is assembled as a kit. See attached protocol or CofA for further details.

**Immunohistochemistry**

Rockland's anti-CDK5 antibody (100-401-163) was diluted 1:500 to detect CDK5 in human brain cortex tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.

**Immunohistochemistry**

Rockland's Anti-CDK2 antibody (100-401-161) was diluted 1:500 to detect CDK2 in human skin tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.



#### Western Blot

Rockland's anti-cdc2 Cyclin Dependent Kinase (100-401-160) was used to detect human p34cdc2 by western blot in untreated (Control) and drug treated lysates of MCF-7 cells. Lane 1-4 represents 3.1 μM, 6.2 μM, 12.5 μM and 25.0 μM genistein treatment of cells before lysates were prepared. Detection occurs using a 1:1,000 dilution. Although this antiserum detects non-specific bands at higher MW, a clear induction of signal is observed as the concentration of drug is increased. Personnel Communication, Xiao He Yang, University of Oklahoma Health Sciences Center.

#### 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.