

## Anti-CDK9

Rabbit Polyclonal Antibody

Catalog # C40-63R

Lot # B3216-34

### Cited Applications

ELISA, IHC, IP, WB

Ideal working dilutions for each application should be empirically determined by the investigator.

### Specificity

Recognizes the 43kDa CDK9 (PITALRE) protein

### Cross Reactivity

Human, Rat and Mouse

### Host/Isotype/Clone#

Rabbit, Antiserum

### Immunogen

The antibody was produced against synthesized peptides corresponding to the C-terminal and N-terminal domains of human CDK9 (PITALRE) protein.

### Formulation

0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 + 0.01% (w/v) Sodium Azide

### Stability

1yr at  $-20^{\circ}$ C from date of shipment

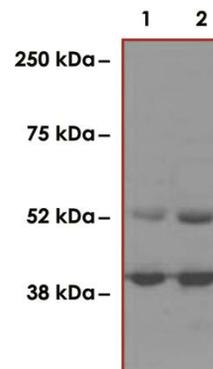
### Scientific Background

CDK9 is a member of the cyclin-dependent protein kinase (CDK) family. CDK9 is closely related to cdc28 and cdc2 and is an important regulator of the cell cycle (1). CDK9 is a component of the multiprotein complex TAK/P-TEF $\beta$ . CDK9 can modulate RNA polymerase II-directed transcription by phosphorylating the C-terminal domain of the largest subunit of RNA polymerase II. CDK9 forms a complex with and is regulated by its regulatory subunit cyclin T or cyclin K. CDK9 also interacts with the HIV-1 Tat protein which suggested a possible involvement of this protein in AIDS (2).

### References:

1. Yang, Z. et al: The 7SK small nuclear RNA inhibits the CDK9/cyclin T1 kinase to control transcription. *Nature*, 2001; 414: 317-322.
2. Bullrich, F. et al: Chromosomal mapping of members of the cdc2 family of protein kinases, cdk3, cdk6, PISLRE, and PITALRE, and a cdk inhibitor, p27-Kip1, to regions involved in human cancer. *Cancer Res.* 1995; 55: 1199-1205.

### Sample Data



Anti-CDK9 (1:1500) was used for Western blot analysis of 1) PC3 and 2) DU145 prostate cancer cells (50ug per lane). Bands at the expected MW of 55 and 42 Kda were detected.

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Purification	Delipidation and defibrination
Stability	1yr at $-20^{\circ}$ C from date of shipment
Storage & Shipping	Store product at $-20^{\circ}$ C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

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