

CDK3 Antibody (N-term Y19)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7519a

Specification

CDK3 Antibody (N-term Y19) - Product Information

Application FC, IHC-P, WB,E

Primary Accession
Reactivity
Host
Clonality
Rabbit
Polyclonal
Isotype
Calculated MW
Antigen Region
Antigen Region

O00526
Human
Rabbit
Polyclonal
Rabbit IgG
A-38

CDK3 Antibody (N-term Y19) - Additional Information

Gene ID 1018

Other Names

Cyclin-dependent kinase 3, Cell division protein kinase 3, CDK3, CDKN3

Target/Specificity

This CDK3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 4-38 amino acids from the N-terminal region of human CDK3.

Dilution

FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CDK3 Antibody (N-term Y19) is for research use only and not for use in diagnostic or therapeutic procedures.

CDK3 Antibody (N-term Y19) - Protein Information

Name CDK3





Synonyms CDKN3

Function Serine/threonine-protein kinase that plays a critical role in the control of the eukaryotic cell cycle; involved in G0-G1 and G1-S cell cycle transitions. Interacts with CCNC/cyclin-C during interphase. Phosphorylates histone H1, ATF1, RB1 and CABLES1. ATF1 phosphorylation triggers ATF1 transactivation and transcriptional activities, and promotes cell proliferation and transformation. CDK3/cyclin-C mediated RB1 phosphorylation is required for G0-G1 transition. Promotes G1-S transition probably by contributing to the activation of E2F1, E2F2 and E2F3 in a RB1-independent manner.

Tissue Location

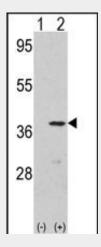
Expressed in cancer cell lines and glioblastoma tissue.

CDK3 Antibody (N-term Y19) - Protocols

Provided below are standard protocols that you may find useful for product applications.

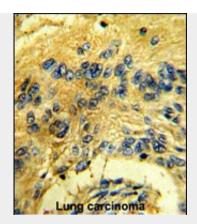
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CDK3 Antibody (N-term Y19) - Images

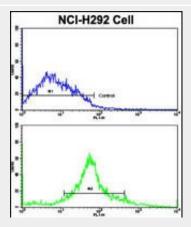


Western blot analysis of CDK3(arrow) using rabbit polyclonal CDK3 Antibody (N-term Y19) (Cat. #). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CDK3 gene (Lane 2) (Origene Technologies).





Formalin-fixed and paraffin-embedded human lung carcinoma reacted with CDK3 Antibody (N-term Y19), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of NCI-H292 cells using CDK3 Antibody (N-term Y19)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CDK3 Antibody (N-term Y19) - Background

This gene encodes a member of the cyclin-dependent protein kinase family. The protein promotes entry into S phase, in part by activating members of the E2F family of transcription factors. The protein also associates with cyclin C and phosphorylates the retinoblastoma 1 protein to promote exit from G0.

CDK3 Antibody (N-term Y19) - References

Bullrich, F., et al., Cancer Res. 55(6):1199-1205 (1995). Meyerson, M., et al., EMBO J. 11(8):2909-2917 (1992).

CDK3 Antibody (N-term Y19) - Citations

• Selective activation of tumor-suppressive MAPKP signaling pathway by triptonide effectively inhibits pancreatic cancer cell tumorigenicity and tumor growth.