

Datasheet for ABIN3030609
anti-CDK2 antibody (AA 230-260)



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5 Images

Overview

Quantity:	0.4 mL
Target:	CDK2
Binding Specificity:	AA 230-260
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CDK2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Flow Cytometry (FACS)

Product Details

Immunogen:	A portion of amino acids 230-260 from the human protein was used as the immunogen for this CDK2 antibody.
Isotype:	Ig Fraction
Cross-Reactivity (Details):	Expected species reactivity: Mouse, Rat, Bovine, Hamster, Xenopus
Purification:	Purified

Target Details

Target:	CDK2
Alternative Name:	CDK2 (CDK2 Products)
Background:	CDK2 is a serine/threonine-protein kinase involved in the control of the cell cycle, essential for

Target Details

meiosis, but dispensable for mitosis. Phosphorylates CTNNB1, USP37, p53/TP53, NPM1, CDK7, RB1, BRCA2, MYC, NPAT, EZH2. Interacts with cyclins A, B1, B3, D, or E. Triggers duplication of centrosomes and DNA. Acts at the G1-S transition to promote the E2F transcriptional program and the initiation of DNA synthesis, and modulates G2 progression, controls the timing of entry into mitosis/meiosis by controlling the subsequent activation of cyclin B/CDK1 by phosphorylation, and coordinates the activation of cyclin B/CDK1 at the centrosome and in the nucleus. Crucial role in orchestrating a fine balance between cellular proliferation, cell death, and DNA repair in human embryonic stem cells (hESCs). Activity of CDK2 is maximal during S phase and G2, activated by interaction with cyclin E during the early stages of DNA synthesis to permit G1-S transition, and subsequently activated by cyclin A2 (cyclin A1 in germ cells) during the late stages of DNA replication to drive the transition from S phase to mitosis, the G2 phase. EZH2 phosphorylation promotes H3K27me3 maintenance and epigenetic gene silencing. Phosphorylates CABLES1 (By similarity). [UniProt]

UniProt:	P24941
Pathways:	PI3K-Akt Signaling , Cell Division Cycle , Mitotic G1-G1/S Phases , DNA Replication , M Phase , Synthesis of DNA

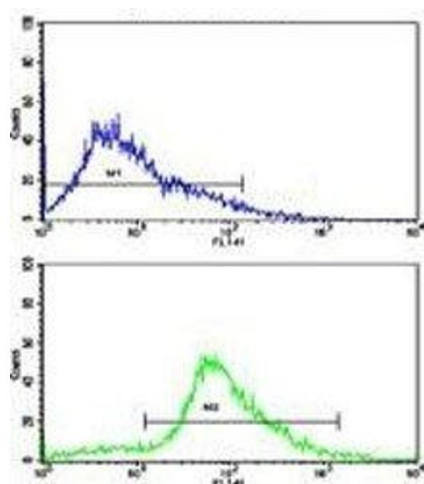
Application Details

Application Notes:	Titration of the CDK2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. Western blot: 1:1000,IHC (Paraffin): 1:50-1:100,Flow Cytometry: 1:10-1:50
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Restrictions:	For Research Use only
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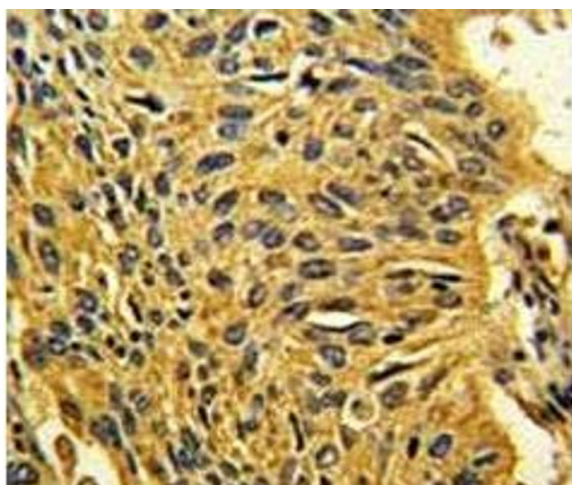
Handling

Format:	Liquid
Buffer:	In 1X PBS, pH 7.4, with 0.09 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Aliquot the CDK2 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.



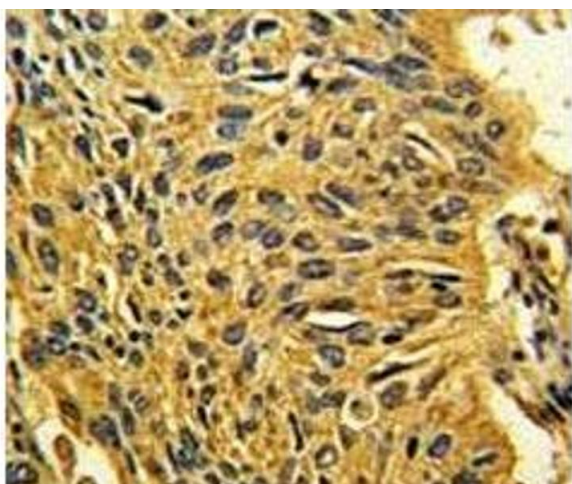
Flow Cytometry

Image 1. Flow cytometric analysis of Jurkat cells using CDK2 antibody (bottom histogram) compared to a negative control (top histogram). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.



Immunohistochemistry

Image 2. IHC analysis of FFPE human lung carcinoma stained with CDK2 antibody



Immunohistochemistry

Image 3. IHC analysis of FFPE human lung carcinoma stained with CDK2 antibody

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN3030609.