10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CDKN2B Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14138b

Product Information

Application	IF, WB, FC, IHC-P, E
Primary Accession	P42772
Other Accession	NP_004927.2, NP_511042.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34671
Calculated MW	14722
Antigen Region	103-131

Additional Information

Gene ID	1030
Other Names	Cyclin-dependent kinase 4 inhibitor B, Multiple tumor suppressor 2, MTS-2, p14-INK4b, p15-INK4b, p15INK4B, CDKN2B, MTS2
Target/Specificity	This CDKN2B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 103-131 amino acids from the C-terminal region of human CDKN2B.
Dilution	IF~~1:25 WB~~1:2000 FC~~1:25 IHC-P~~1:250 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	CDKN2B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDKN2B
Synonyms	MTS2

Function	Interacts strongly with CDK4 and CDK6. Potent inhibitor. Potential effector of TGF-beta induced cell cycle arrest.
Cellular Location	Cytoplasm. Note=Also found in the nucleus
Tissue Location	Isoform 2 is expressed in normal (keratinocytes, fibroblasts) and tumor cell lines.

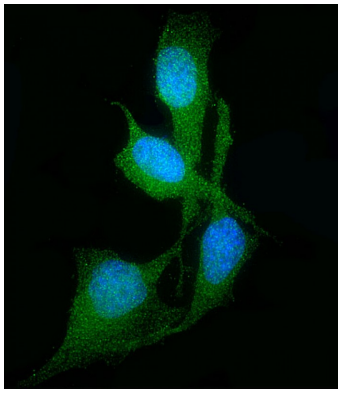
Background

This gene lies adjacent to the tumor suppressor gene CDKN2A in a region that is frequently mutated and deleted in a wide variety of tumors. This gene encodes a cyclin-dependent kinase inhibitor, which forms a complex with CDK4 or CDK6, and prevents the activation of the CDK kinases, thus the encoded protein functions as a cell growth regulator that controls cell cycle G1 progression. The expression of this gene was found to be dramatically induced by TGF beta, which suggested its role in the TGF beta induced growth inhibition. Two alternatively spliced transcript variants of this gene, which encode distinct proteins, have been reported.

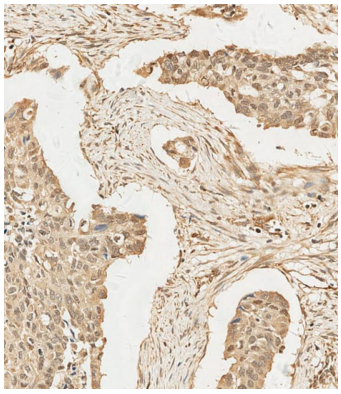
References

Camacho, C.V., et al. Carcinogenesis 31(10):1889-1896(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Pechlivanis, S., et al. Arterioscler. Thromb. Vasc. Biol. 30(9):1867-1872(2010)
Heni, M., et al. Diabetes (2010) In press :
Roder, C., et al. Childs Nerv Syst (2010) In press :

Images

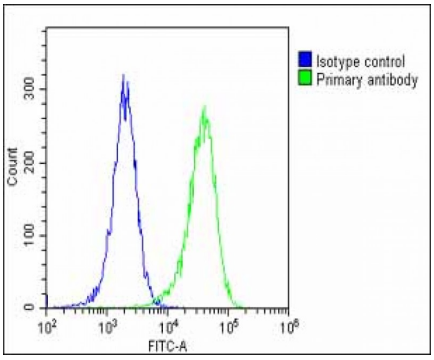


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized Hela cells labeling CDKN2B with AP14138b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG secondary antibody at 1/200 dilution (green). Immunofluorescence image showing Nucleus and Cytoplasm staining on Hela cell line. The nuclear counter stain is DAPI (blue).

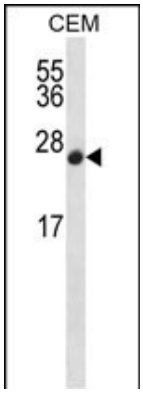


AP14138b staining CDKN2B in human lung adenocarcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Samples were incubated with primary antibody (1/100) for 1 hours at room temperature. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

Overlay histogram showing Hela cells stained with AP14138b(green line). The cells were fixed with 2%



paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP14138b, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



CDKN2B Antibody (C-term) (Cat. #AP14138b) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the CDKN2B antibody detected the CDKN2B protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.