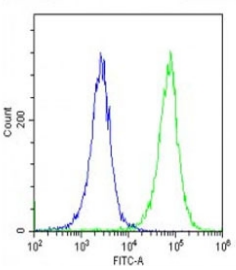
CDKN2A Antibody / p16INK4a (F54356)

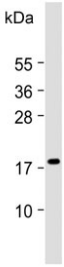
Catalog No.	Formulation	Size
F54356-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54356-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

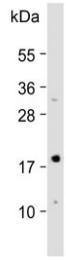
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	P42771
Localization	Nuclear, cytoplasmic
Applications	Immunofluorescence : 1:25 Western Blot : 1:500-1:2000 Flow Cytometry : 1:25 (1x10e6 cells) Immunohistochemistry (FFPE) : 1:25
Limitations	This CDKN2A antibody is available for research use only.



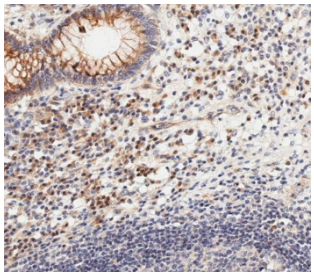
Flow cytometry testing of fixed and permeabilized human HeLa cells with CDKN2A antibody; Blue=isotype control, Green= CDKN2A antibody.



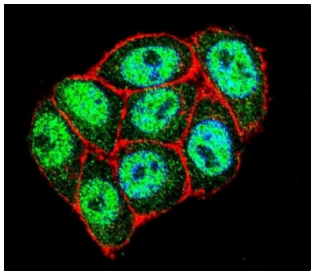
Western blot testing of human HeLa cell lysate with CDKN2A antibody. Predicted molecular weight ~16 kDa.



Western blot testing of human RPMI-8226 cell lysate with CDKN2A antibody. Predicted molecular weight ~16 kDa.



IHC testing of FFPE human epityphlon tissue with CDKN2A antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Immunofluorescent staining of fixed and permeabilized human HeLa cells with CDKN2A antibody (green), DAPI nuclear stain (blue) and anti-Actin (red).

Description

This gene generates several transcript variants which differ in their first exons. At least three alternatively spliced variants encoding distinct proteins have been reported, two of which encode structurally related isoforms known to function as inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame (ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, MDM1, a protein responsible for the degradation of p53. In spite of the structural and functional differences, the CDK inhibitor isoforms and the ARF product encoded by this gene, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. This gene is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene.

Application Notes

The stated application concentrations are suggested starting points. Titration of the CDKN2A antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 104-131 from the human protein was used as the immunogen for the CDKN2A antibody.

Storage

Aliquot the CDKN2A antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.