

(KO Validated) CDKN2A / p16INK4a Polyclonal Antibody

Catalog No. E-AB-63473

Note: Centrifuge before opening to ensure complete recovery of vial contents.

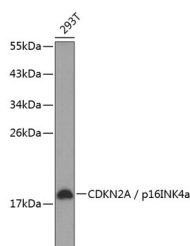
Description

Reactivity	Human, Mouse, Rat
Immunogen	A synthetic peptide of human CDKN2A / p16INK4a (NP_000068.1).
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Conjugation	Unconjugated
Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Applications Recommended Dilution

WB 1:500-1:2000 IF
1:50-1:200

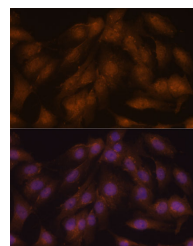
Data



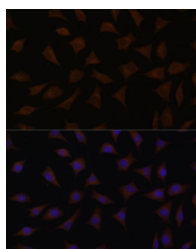
Western blot analysis of extracts of 293T cells using CDKN2A / p16INK4a Polyclonal Antibody.

Observed Mw: 18kDa
Calculated

Mw: 8kDa/11kDa/12kDa/13kDa/16kDa/17kDa



Immunofluorescence analysis of C6 cells using CDKN2A / p16INK4a Polyclonal Antibody at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of L929 cells using CDKN2A / p16INK4a Polyclonal Antibody at dilution of 1:100. Blue: DAPI for nuclear staining.

Preparation & Storage

Storage Store at -20°C. Avoid freeze / thaw cycles.

For Research Use Only

Background

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, the E3 ubiquitin-protein ligase MDM2, 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.