Product Datasheet

CDKN2A Antibody

Catalog No: #32050

Package Size: #32050-1 50ul #32050-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	CDKN2A Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IF
Species Reactivity	Human
Specificity	The antibody detects endogenous level of total CDKN2A protein.
Immunogen Type	Peptide
Immunogen Description	A synthetic peptide of human CDKN2A.
Target Name	CDKN2A
Other Names	CDKN2A; ARF; CDK4I; CDKN2; CMM2
Accession No.	Swiss-Prot:P42771NCBI Gene ID:1029
Uniprot	P42771
GeneID	1029;
SDS-PAGE MW	16KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

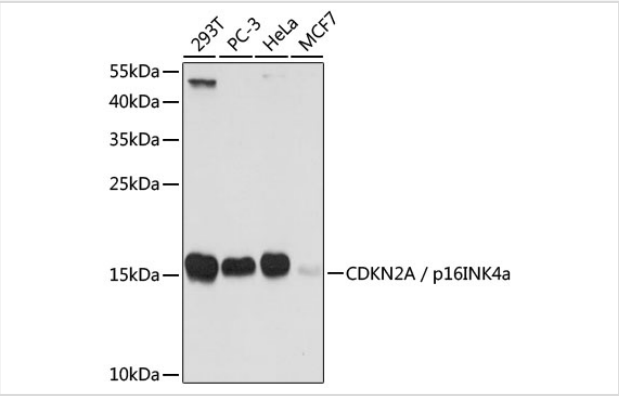
Application Details

WB□1:500 - 1:2000

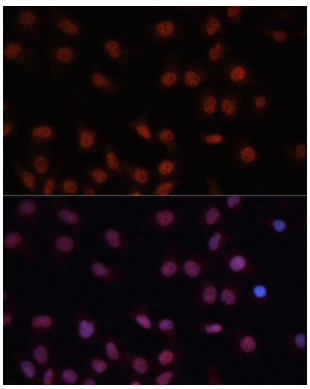
IHC□1:50 - 1:200

IF□1:50 - 1:200

Images



Western blot analysis of extracts of various cell lines, using CDKN2A / p16INK4a at 1:1000 dilution.



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

Background

The division cycle of eukaryotic cells is regulated by a family of protein kinases known as the cyclin-dependent kinases (CDKs). The sequential activation of individual members of this family and their consequent phosphorylation of critical substrates promotes orderly progression through the cell cycle. It has been reported that CDKN2A binds to CDK4 and inhibits the catalytic activity of the CDK4/cyclin D enzymes. CDKN2A seems to act in a regulatory feedback circuit with CDK4, D-type cyclins and retinoblastoma protein (1). The INK4 (inhibitor of cyclin-dependent kinase 4) family consists of four tumor-suppressor proteins: p15(INK4B), CDKN2A(INK4A), p18(INK4C), and p19(INK4D). While their sequences and structures are highly homologous, they show appreciable differences in conformational flexibility, stability, and aggregation tendency (2). Cell cycle arrest at the G1 checkpoint allows completion of critical macromolecular events prior to S phase. Regulators of the G1 checkpoint include an inhibitor of cyclin-dependent kinase, CDKN2AINK4; two tumor-suppressor proteins, p53 and RB and cyclin D1. CDKN2AINK4 is a tumor-suppressor protein and that genetic and epigenetic abnormalities in genes controlling the G1 checkpoint can lead to both escape from senescence and cancer formation (3).

Note: This product is for in vitro research use only