

For Research Use Only

# CDKN2A/P16-INK4A Recombinant antibody, PBS Only

Catalog Number: 81373-10-PBS



## Basic Information

Catalog Number:

81373-10-PBS

Size:

100ug, Concentration: 1 mg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1328

GenBank Accession Number:

BC021998

GeneID (NCBI):

1029

UNIPROT ID:

P42771

Full Name:

cyclin-dependent kinase inhibitor 2A

Calculated MW:

16 kDa

Observed MW:

16 kDa

Purification Method:

Protein A purification

CloneNo.:

241438B2

## Applications

Tested Applications:

WB, IHC, IF/ICC, Indirect ELISA

Species Specificity:

human

## Background Information

P16-INK4A is also named as CDKN2A, MLM, Tumor suppressor ARF, Alternative reading frame. The tumor suppressor protein p16Ink4a (encoded from the CDKN2A locus) is often transcriptionally activated in cells undergoing senescence and is one of the main regulators of this program, and it is upregulated in multiple tissues during aging (PMID:17055429). p16-Ink4a is the principal member of the Ink4 family of CDK inhibitors. p16-Ink4a contributes to the regulation of cell cycle progression by inhibiting the S phase. p16Ink4a binds to CDK4/6, inhibiting cyclin D-CDK4/6 complex formation and CDK4/6-mediated phosphorylation of Rb family members. Expression of p16-Ink4a maintains the Rb family members in a hypophosphorylated state, which promotes binding to E2F1 and leads to G1 cell cycle arrest (PMID: 21297668).

## Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS only, pH7.3

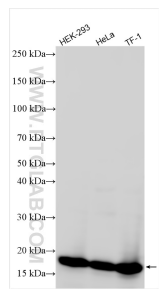
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

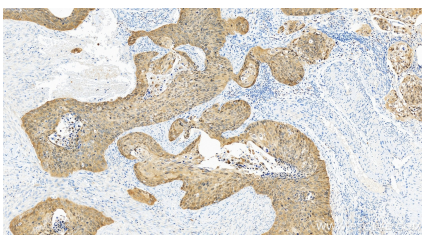
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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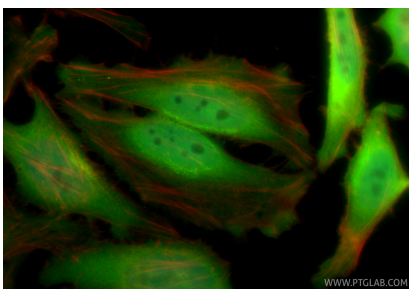
## Selected Validation Data



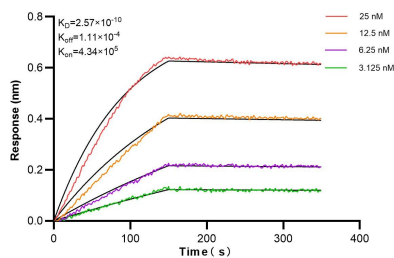
Various lysates were subjected to SDS PAGE followed by western blot with 81373-10-RR (P16-INK4A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81373-10-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 81373-10-RR (P16-INK4A antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81373-10-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CDKN2A/P16-INK4A antibody (81373-10-RR, Clone: 241438B2 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 81373-10-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 81373-10-RR against Human CDKN2A/P16-INK4A were performed. The affinity constant is 0.257 nM.