

For Research Use Only

# CDKN2A/P16-INK4A Recombinant antibody

Catalog Number: 81373-10-RR



## Basic Information

<b>Catalog Number:</b> 81373-10-RR	<b>GenBank Accession Number:</b> BC021998	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1029	<b>CloneNo.:</b> 241438B2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P42771	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000 IHC: 1:250-1:1000 IF/ICC: 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> cyclin-dependent kinase inhibitor 2A	
<b>Immunogen Catalog Number:</b> AG1328	<b>Calculated MW:</b> 16 kDa	
	<b>Observed MW:</b> 16 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b> WB : HEK-293 cells, HeLa cells, TF-1 cells
<b>Species Specificity:</b> human	<b>IHC :</b> human cervical cancer tissue,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IF/ICC :</b> HeLa cells,

## 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

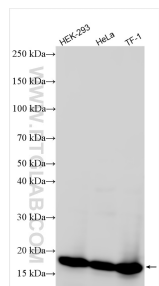
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

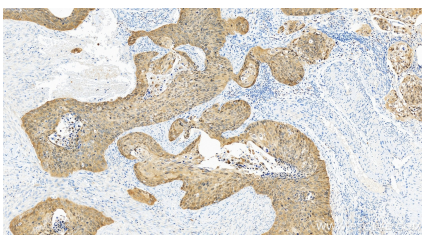
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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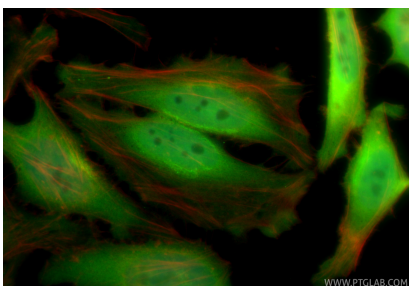
## Selected Validation Data



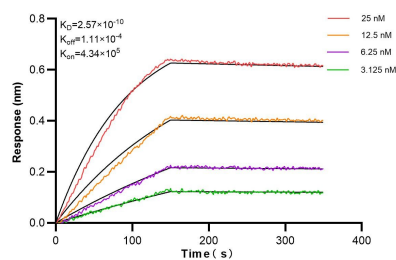
Various lysates were subjected to SDS PAGE followed by western blot with 81373-10-RR (P16-INK4A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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).



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).



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