

# P16-INK4A Monoclonal antibody

Catalog Number: 60626-1-Ig

## Basic Information

<b>Catalog Number:</b> 60626-1-Ig	<b>GenBank Accession Number:</b> BC021998	<b>Purification Method:</b> Protein A purification
<b>Concentration:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 1029	<b>CloneNo.:</b> 1C9D3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P42771	<b>Recommended Dilutions:</b> WB 1:1000-1:5000 IHC 1:2500-1:10000 IF/ICC 1:500-1:2000
<b>Isotype:</b> IgG2a	<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

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Species Specificity:**  
human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** SiHa cells, HeLa cells, HEK-293 cells, TF-1 cells

**IHC :** human tonsillitis tissue,

**IF/ICC :** 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 pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

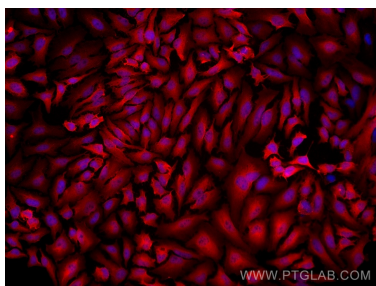
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

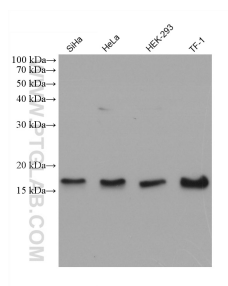
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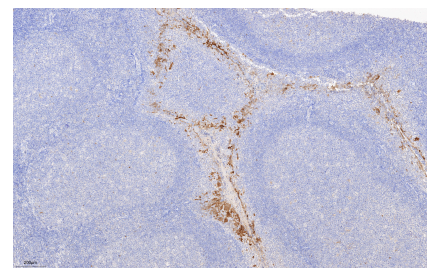
## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using P16-INK4A antibody (60626-1-Ig, Clone: 1C9D3 ) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004 ).



Various lysates were subjected to SDS PAGE followed by western blot with 60626-1-Ig (P16-INK4A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 60626-1-Ig (P16-INK4A antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).