### For Research Use Only

# P16-INK4A Polyclonal antibody

Catalog Number: 31221-1-AP



**Purification Method:** 

WB 1:1000-1:4000

Antigen affinity purification

Recommended Dilutions:

**Basic Information** 

Catalog Number: GenBank Accession Number: 31221-1-AP NM\_058195

 Size:
 GeneID (NCBI):

 400 μ g/ml
 1029

 5 current
 LIMIDDOT ID:

Source: UNIPROT ID:
Rabbit Q8N726-1
Isotype: Full Name:

IgG cyclin-dependent kinase inhibitor 2A Immunogen Catalog Number: (melanoma, p16, inhibits CDK4)

AG33340 Calculated MW:

14kd

Observed MW: 16-18 kDa

**Applications** 

Tested Applications: WB, ELISA

Species Specificity:

Human

Positive Controls:

WB: 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 DCCDK4/6 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

## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 31221-1-AP (P16-INK4A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.