

# Phospho-p16-INK4A(S7) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP3185a

## Product Information

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<b>Application</b>	WB, IHC-P, E
<b>Primary Accession</b>	<a href="#">P42771</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Calculated MW</b>	16533

## Additional Information

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<b>Gene ID</b>	1029
<b>Other Names</b>	Cyclin-dependent kinase inhibitor 2A, isoforms 1/2/3, Cyclin-dependent kinase 4 inhibitor A, CDK4I, Multiple tumor suppressor 1, MTS-1, p16-INK4a, p16-INK4, p16INK4A, CDKN2A, CDKN2, MTS1
<b>Target/Specificity</b>	This p16-INK4A Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S7 of human p16-INK4A.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Phospho-p16-INK4A(S7) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CDKN2A ( <a href="#">HGNC:1787</a> )
<b>Synonyms</b>	CDKN2, MTS1
<b>Function</b>	Acts as a negative regulator of the proliferation of normal cells by interacting strongly with CDK4 and CDK6. This inhibits their ability to interact with cyclins D and to phosphorylate the retinoblastoma protein.

<b>Cellular Location</b>	Cytoplasm. Nucleus
<b>Tissue Location</b>	Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific

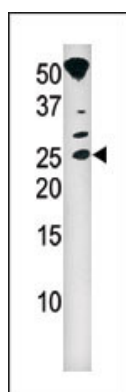
## Background

p16-INK4A functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, MDM1, a protein responsible for the degradation of p53. This protein acts as a negative regulator of the proliferation of normal cells by interacting strongly with CDK4 and CDK6. This inhibits their ability to interact with cyclins D and to phosphorylate the retinoblastoma protein. The gene for this protein is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene.

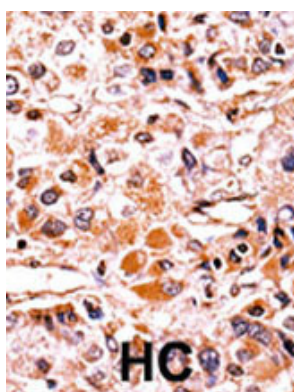
## References

Ausserlechner, M.J., et al., *Leukemia* 19(6):1051-1057 (2005). Kawamata, N., et al., *Eur. J. Haematol.* 74(5):424-429 (2005). Wang, J.L., et al., *Mod. Pathol.* 18(5):629-637 (2005). Kuroda, H., et al., *Cancer Genet. Cytogenet.* 158(2):172-179 (2005). Fu, G.H., et al., *FEBS Lett.* 579(10):2105-2110 (2005).

## Images



Western blot analysis of anti-p16-INK4A Pab (Cat. #AP3185a) in A2058 cell line lysate (35ug/lane). p16-INK4A (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

## Citations

- [The atr protein kinase controls UV-dependent upregulation of p16INK4A through inhibition of Skp2-related polyubiquitination/degradation.](#)

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