

# Phospho-p16-INK4A(S152) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP3184a

## 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, Rat, Mouse      |
| <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 S152 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(S152) 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. |

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|--------------------------|-----------------------------------------------------------------------------------------------|
| <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 |

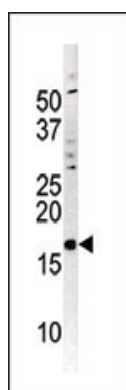
## Background

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.

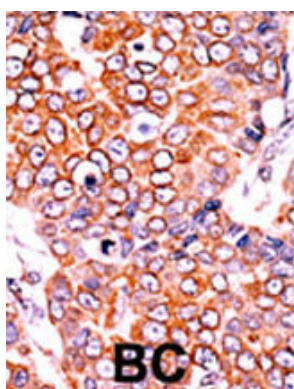
## References

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



The anti-Phospho-p16-INK4A-S152 Pab (Cat. #AP3184a) is used in Western blot to detect Phospho-p16-INK4A-S152 in A2058 tissue lysate



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.](#)
- [Overexpression of the transcription factor Yin-Yang-1 suppresses differentiation of HaCaT cells in three-dimensional cell culture.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.