

## p16 INK4A Polyclonal Antibody

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|------------------------------|---|
| <b>Catalog No :</b>          | YT3493  |
| <b>Reactivity :</b>          | Human;Mouse   |
| <b>Applications :</b>        | WB;ELISA  |
| <b>Target :</b>              | p16   |
| <b>Gene Name :</b>           | CDKN2A  |
| <b>Protein Name :</b>        | Cyclin-dependent kinase inhibitor 2A isoforms 1/2/3   |
| <b>Human Gene Id :</b>       | 1029  |
| <b>Human Swiss Prot No :</b> | P42771  |
| <b>Mouse Gene Id :</b>       | 12578   |
| <b>Mouse Swiss Prot No :</b> | P51480  |
| <b>Immunogen :</b>           | The antiserum was produced against synthesized peptide derived from human p16 INK. AA range:10-59                     |
| <b>Specificity :</b>         | p16 Polyclonal Antibody detects endogenous levels of p16 protein.   |
| <b>Formulation :</b>         | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| <b>Source :</b>              | Polyclonal, Rabbit,IgG  |
| <b>Dilution :</b>            | WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.  |
| <b>Purification :</b>        | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| <b>Concentration :</b>       | 1 mg/ml   |
| <b>Storage Stability :</b>   | -15°C to -25°C/1 year(Do not lower than -25°C)  |

**Observed Band :** 16kD

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**Background :**

alternative products:Isoform 1 and isoform 4 arise due to the use of two alternative first exons joined to a common exon 2 at the same acceptor site but in different reading frames, resulting in two completely different isoforms,disease:Defects in CDKN2A are a cause of Li-Fraumeni syndrome (LFS) [MIM:151623]. LFS is a highly penetrant familial cancer phenotype usually associated with inherited mutations in TP53.,disease:Defects in CDKN2A are involved in tumor formation in a wide range of tissues.,disease:Defects in CDKN2A are the cause of cutaneous malignant melanoma 2 (CMM2) [MIM:155601]. Inheritance is autosomal dominant. Malignant melanoma is a malignant neoplasm of melanocytes, arising de novo or from a preexisting benign nevus, which occurs most often in the skin but also may involve other sites.,disease:Defects in CDKN2A are the cause of familial atypical multiple mole melanoma-pancreatic carcinoma syndrome (FAMMMPC) [MIM:606719].,disease:Defects in CDKN2A are the cause of melanoma-astrocytoma syndrome [MIM:155755]. The melanoma-astrocytoma syndrome is characterized by a dual predisposition to melanoma and neural system tumors, commonly astrocytoma.,function: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.,function:Capable of inducing cell cycle arrest in G1 and G2 phases. Acts as a tumor suppressor. Binds to MDM2 and blocks its nucleocytoplasmic shuttling by sequestering it in the nucleolus. This inhibits the oncogenic action of MDM2 by blocking MDM2-induced degradation of p53 and enhancing p53-dependent transactivation and apoptosis. Also induces G2 arrest and apoptosis in a p53-independent manner by preventing the activation of cyclin B1/CDC2 complexes. Binds to BCL6 and down-regulates BCL6-induced transcriptional repression. Binds to E2F1 and MYC and blocks their transcriptional activator activity but has no effect on MYC transcriptional repression. Binds to TOP1/TOPOI and stimulates its activity. This complex binds to rRNA gene promoters and may play a role in rRNA transcription and/or maturation. Interacts with NPM1/B23 and promotes its polyubiquitination and degradation, thus inhibiting rRNA processing. Interacts with UBE2I/UBC9 and enhances sumoylation of a number of its binding partners including MDM2 and E2F1. Binds to HUWE1 and represses its ubiquitin ligase activity. May play a role in controlling cell proliferation and apoptosis during mammary gland development.,online information:Database of CDKN2A germline and somatic variants,online information:P16INK4a entry,polymorphism:Genetic variations in CDKN2A may underlie susceptibility to uveal melanoma [MIM:155720]. Uveal melanoma is the most common type of ocular malignant tumor, consisting of overgrowth of uveal melanocytes and often preceded by a uveal nevus.,similarity:Belongs to the CDKN2 cyclin-dependent kinase inhibitor family.,similarity:Contains 4 ANK repeats.,subunit:Does not interact with cyclins, CDC2, CDK2, CDK4, CDK5 or CDK6. Binds to BCL6, E2F1, HUWE1, MDM2, MYC, NPM1/B23, TOP1/TOPOI and UBE2I/UBC9. Interacts with TBRG1. Interacts with CDKN2AIP and E4F1.,subunit:Heterodimer with CDK4 or CDK6. Isoform 3 does not bind to CDK4.,tissue specificity:Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific.,

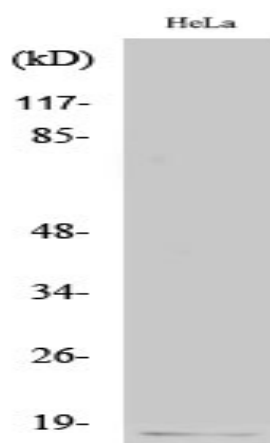
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**Function :** alternative products:Isoform 1 and isoform 4 arise due to the use of two alternative first exons joined to a common exon 2 at the same acceptor site but in different reading frames, resulting in two completely different isoforms,disease:Defects in CDKN2A are a cause of Li-Fraumeni syndrome (LFS) [MIM:151623]. LFS is a highly penetrant familial cancer phenotype usually associated with inherited mutations in TP53.,disease:Defects in CDKN2A are involved in tumor formation in a wide range of tissues.,disease:Defects in CDKN2A are the cause of cutaneous malignant melanoma 2 (CMM2) [MIM:155601]. Inheritance is autosomal dominant. Malignant melanoma is a malignant neoplasm of melanocytes, arising de novo or from a preexisting benign nevus, which occurs most often in the skin but also may involve other sites.,disease:Defects in CDKN2A are the cause of familial atypical multiple mole melanoma-pan

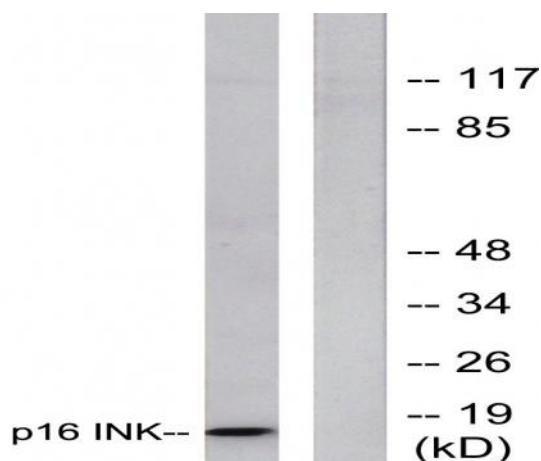
**Subcellular Location :** Cytoplasm . Nucleus .

**Expression :** Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific.

## Products Images



Western Blot analysis of various cells using p16 Polyclonal Antibody



Western blot analysis of lysates from HeLa cells, using p16 INK Antibody. The lane on the right is blocked with the synthesized peptide.