p16-INK4a (Phospho-Ser152) rabbit pAb

Cat#: orb767331 (Manual)

For research use only. Not intended for diagnostic use.

Product Name	p16-INK4a (Phospho-Ser152) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Rat;Mouse;
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human p16-INK4a around the phosphorylation site of Ser152. AA range:107-156
Specificity	Phospho-p16 (S326) Polyclonal Antibody detects endogenous levels of p16 protein only when phosphorylated at S326.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Cyclin-dependent kinase inhibitor 2A isoforms 1/2/3
Gene Name	CDKN2A
Cellular localization	Cytoplasm . Nucleus .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal

Concentration	1 mg/ml
Observed band	20kD
Human Gene ID	1029
Human Swiss-Prot Number	P42771
Alternative Names	CDKN2A; CDKN2; MTS1; 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
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

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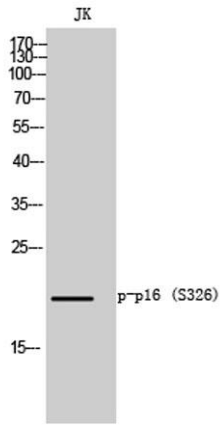
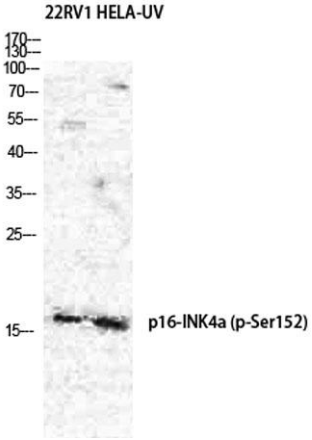
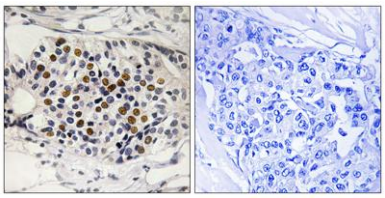
skeletal muscle. Isoform 3 is pancreas-specific.,



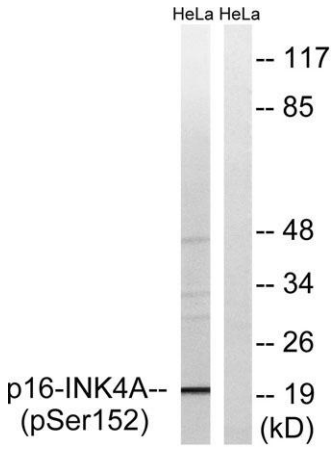
Western Blot analysis of JK cells using Phospho-p16 (S326) Polyclonal Antibody diluted at 1:500



Western Blot analysis of 22RV1 HELA cells using Phospho-p16 (S326) Polyclonal Antibody diluted at 1:500



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using p16-INK4a (Phospho-Ser152) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells treated with EPO 20U/ml 15', using p16-INK4a (Phospho-Ser152) Antibody. The lane on the right is blocked with the phospho peptide.

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