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Phospho-CDKN2A(S8) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3792a

Product Information

Application	DB, E
Primary Accession	P42771
Other Accession	NP_000068.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41435
Calculated MW	16533

Additional Information

Gene ID	1029
Other Names	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
Target/Specificity	This CDKN2A Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S8 of human CDKN2A.
Dilution	DB~~1:500 E~~Use at an assay dependent concentration.
Format	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.
Storage	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.
Precautions	Phospho-CDKN2A(S8) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDKN2A (HGNC:1787)
Synonyms	CDKN2, MTS1
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.
Cellular Location	Cytoplasm. Nucleus
Tissue Location	Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific

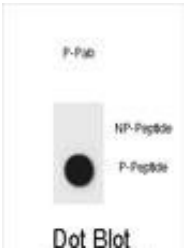
Background

This gene generates several transcript variants which differ in their first exons. At least three alternatively spliced variants encoding distinct proteins have been reported, two of which encode structurally related isoforms known to function as inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame (ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product 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. In spite of the structural and functional differences, the CDK inhibitor isoforms and the ARF product encoded by this gene, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. This gene is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene.

References

Kovacs, E., et al. Proc. Natl. Acad. Sci. U.S.A. 107(12):5429-5434(2010) Irvine, M., et al. Cell Cycle 9(4):829-839(2010) Zhang, H.J., et al. J. Cell. Biochem. 106(3):464-472(2009) Ivanchuk, S.M., et al. Cell Cycle 7(12):1836-1850(2008) Bandyopadhyay, K., et al. Biochemistry 46(49):14325-14334(2007)

Images



Dot blot analysis of CDKN2A Antibody (Phospho S8) Phospho-specific Pab (Cat. #AP3792a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.