

p14 Polyclonal Antibody

Cat No: HR1AP4206

For research use only

Overview

Product Name	p14 Polyclonal Antibody
Source	Rabbit
Applications	WB,IHC-p,IF,ELISA
Species Reactivity	Human
Recommended Dilutions	
Immunogen	
Species	Rabbit
Storage	-20°C/1 year
Isotype	
Clonality	
Concentration	1 mg/ml
Observed band	18kDa
GeneID?Human?	CDKN2A
Human Swiss-Prot No.	
Cellular localization	
Alternative Names	CDKN2A; CDKN2; MLM; Cyclin-dependent kinase inhibitor 2A; isoform 4; p14ARF; p19ARF
Background	CDKN2A 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, the E3 ubiquitin-protein ligase MDM2, 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 CDKN2A, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. CDKN2A is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene.