

Basic Information

Product Name	Anti-p21/CDKN1A Antibody	
Gene Name	CDKN1A	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, ICC/IF, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human P21/CDKN1A recombinant protein (Position: M1-R140).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	21 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

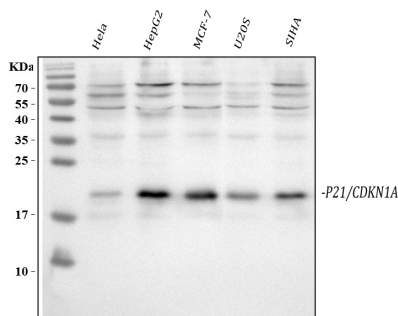
This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen, a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of cyclin-dependent kinase2, and may be instrumental in the

execution of apoptosis following caspase activation. Mice that lack this gene have the ability to regenerate damaged or missing tissue. Multiple alternatively spliced variants have been found for this gene.

Reference

Anti-p21/CDKN1A Antibody被引用在4文献中。

Selected Validation Data



Western blot analysis of anti-P21/CDKN1A antibody (A00145-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

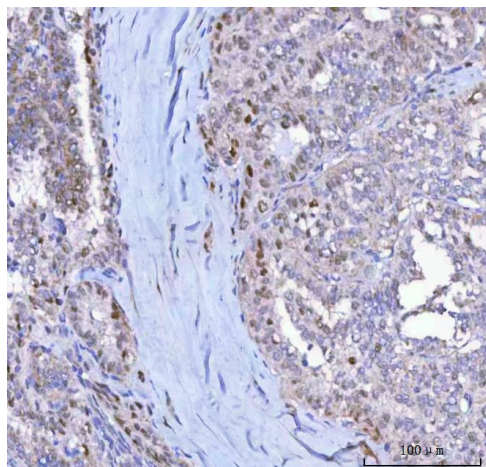
Lane 3: human MCF-7 whole cell lysates,

Lane 4: human U2OS whole cell lysates,

Lane 5: human SiHa whole cell lysates.

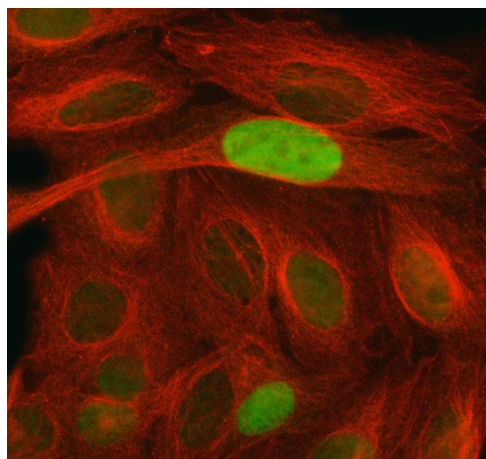
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-P21/CDKN1A antigen affinity purified polyclonal antibody (A00145-1) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for P21/CDKN1A at approximately 21 kDa. The expected band size for P21/CDKN1A is at 21 kDa.



IHC analysis of P21/CDKN1A using anti-P21/CDKN1A antibody (A00145-1).

P21/CDKN1A was detected in a paraffin-embedded section of human thyroid cancer tissue. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of P21/CDKN1A using anti-P21/CDKN1A antibody (A00145-1) and anti-Beta Tubulin antibody (M01857-3).

P21/CDKN1A was detected in an immunocytochemical section of HeLa cells. Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog#BA1127) and Fluoro550-conjugated Anti-mouse IgG Secondary Antibody (red)(Catalog#BA1133) were used as secondary antibody.