

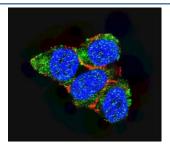
p21WAF1 Antibody / CDKN1A (F54937)

Catalog No.	Formulation Size	
F54937-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54937-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

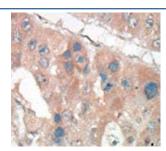
Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P38936
Localization	Nuclear, cytoplasmic
Applications	Flow Cytometry: 1:25 (1x10e6 cells) Immunofluorescence: 1:25 Immunohistochemistry (FFPE): 1:25 Western Blot: 1:500-1:2000
Limitations	This p21WAF1 antibody is available for research use only.

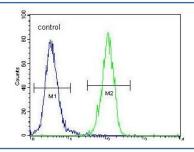
kDa 250 150 100 75 -	Western blot testing of human T-47D cell lysate with p21WAF1 antibody. Expected molecular weight: 18-21 kDa.
50 37	
25 20 - ∢ 15	



Immunofluorescent staining of HEK293 cells with p21WAF1 antibody (green), DAPI nuclear stain (blue) and anti-Actin (red).



IHC testing of FFPE human cancer tissue with p21WAF1 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Flow cytometry testing of human HEK293 cells with p21WAF1 antibody; Blue=isotype control, Green= p21WAF1 antibody.

Description

CDKN1A is a potent cyclin-dependent kinase inhibitor. It binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at G1. Expression 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 (PCNA), 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 CDK2, and may be instrumental in the execution of apoptosis following caspase activation.

Application Notes

The stated application concentrations are suggested starting points. Titration of the p21WAF1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 134-164 from the human protein was used as the immunogen for the p21WAF1 antibody.

Storage

Aliquot the p21WAF1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.