

## p21WAF1 Antibody / CDKN1A (F54937)

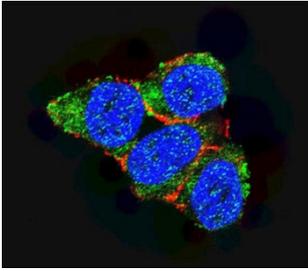
Catalog No.	Formulation	Size
F54937-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54937-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

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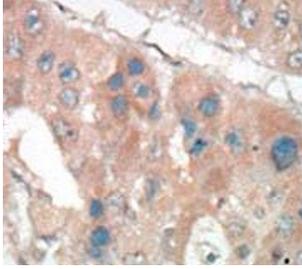
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit Ig
<b>Purity</b>	Purified
<b>UniProt</b>	P38936
<b>Localization</b>	Nuclear, cytoplasmic
<b>Applications</b>	Flow Cytometry : 1:25 (1x10 <sup>6</sup> cells) Immunofluorescence : 1:25 Immunohistochemistry (FFPE) : 1:25 Western Blot : 1:500-1:2000
<b>Limitations</b>	This p21WAF1 antibody is available for research use only.

kDa  
250  
150  
100  
75  
50  
37  
25  
20  
15

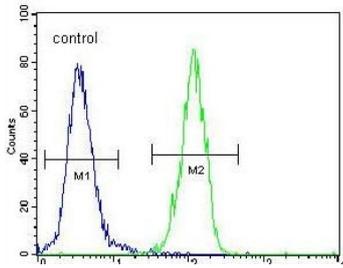
Western blot testing of human T-47D cell lysate with p21WAF1 antibody. Expected molecular weight: 18-21 kDa.



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.

