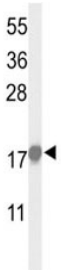
p21 Antibody (F51647)

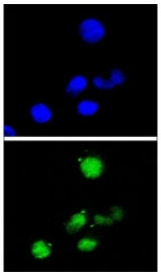
Catalog No.	Formulation	Size
F51647-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F51647-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P38936
Applications	Western Blot : 1:1000 Immunofluorescence : 1:10-1:50
Limitations	This p21 antibody is available for research use only.



Western blot analysis of p21 antibody and HeLa lysate



Confocal immunofluorescent analysis of p21 antibody with HepG2 cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used as a nuclear counterstain (blue).

Description

This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 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 (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. Two alternatively spliced variants, which encode an identical protein, have been reported.

Application Notes

Titration of the p21 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 105-140 from the human protein was used as the immunogen for this p21 antibody.

Storage

Aliquot the p21 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.