Product Datasheet

CDKN1A Antibody

Catalog No: #32286

Package Size: #32286-1 50ul #32286-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

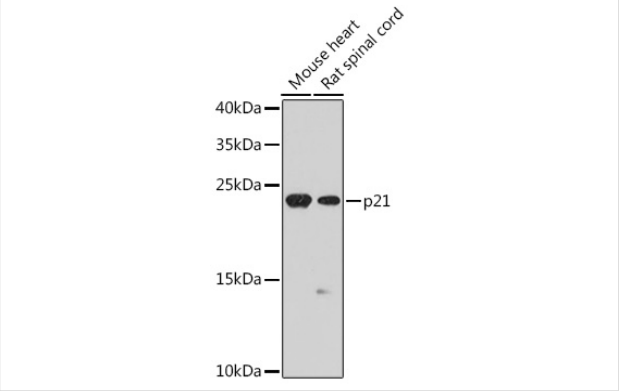
Description

Product Name	CDKN1A Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total CDKN1A protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human CDKN1A.
Target Name	CDKN1A
Other Names	CAP20; CDKN1; CIP1; MDA-6; P21
Accession No.	Swiss-Prot:P38936NCBI Gene ID:1026
Uniprot	P38936
GeneID	1026;
SDS-PAGE MW	21KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

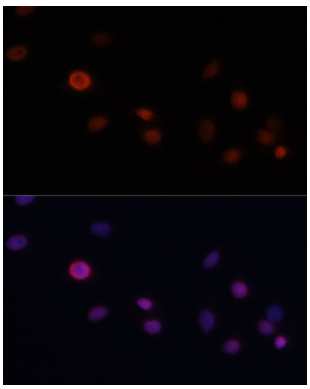
Application Details

WB□1:500 - 1:2000IF□1:50 - 1:200

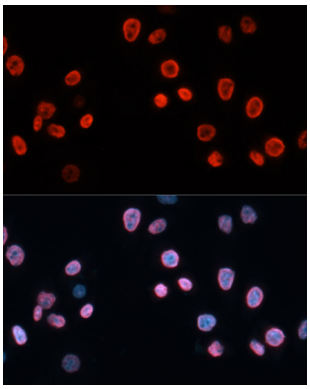
Images



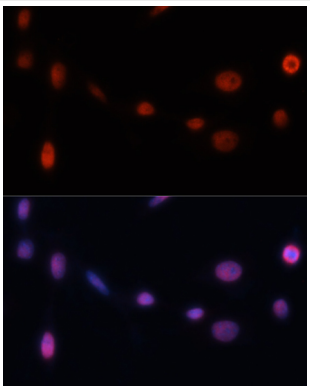
Western blot analysis of extracts of various cell lines, using p21 at 1:1000 dilution.



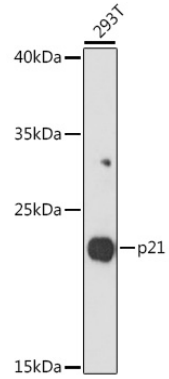
Immunofluorescence analysis of C6 cells using p21 at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using p21 at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using p21 at dilution of 1:100. Blue: DAPI for nuclear staining.



Western blot analysis of extracts of 293T cells, using p21 at 1:1000 dilution.

Background

The tumor suppressor protein p21 Waf1/Cip1 acts as an inhibitor of cell cycle progression. It functions in stoichiometric relationships forming heterotrimeric complexes with cyclins and cyclin-dependent kinases. In association with CDK2 complexes, it serves to inhibit kinase activity and block progression through G1/S (1). However, p21 may also enhance assembly and activity in complexes of CDK4 or CDK6 and cyclin D (2). The carboxy-terminal region of p21 is sufficient to bind and inhibit PCNA, a subunit of DNA polymerase, and may coordinate DNA replication with cell cycle progression (3). Upon UV damage or during cell cycle stages when cdc2/cyclin B or CDK2/cyclin A is active, p53 is phosphorylated and upregulates p21 transcription via a p53-responsive element (4). Protein levels of p21 are downregulated through ubiquitination and proteasomal degradation (5).

Note: This product is for in vitro research use only