# P21 Polyclonal Antibody

Catalog No: #30427

Package Size: #30427-1 50ul #30427-2 100ul



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

### Description

Product Name	P21 Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Affinity purification
Applications	WB,IHC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	Recombinant fusion protein of human P21 (NP_001207707.1).
Conjugates	Unconjugated
Other Names	CDKN1A; CAP20; CDKN1; CIP1; MDA-6; P21; SDI1; WAF1; p21CIP1; cyclin-dependent kinase inhibitor 1
Accession No.	Swiss-Prot#:P38936NCBI Gene ID:1026
Calculated MW	21kDa
Formulation	Avoid freeze / thaw cycles. Buffer: PBS with 50% glycerol, pH7.4.
Storage	Store at -20°C

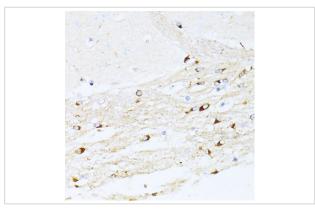
### **Application Details**

WB□1:500 - 1:2000IHC□1:20 - 1:100

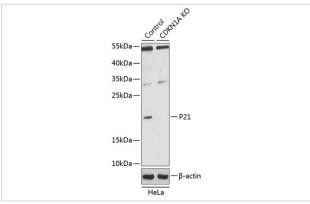
## **Images**



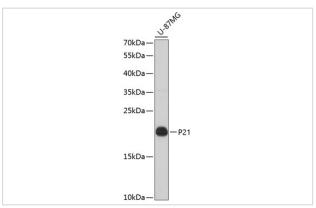
Immunohistochemistry of paraffin-embedded human uterine cancer using P21 at dilution of 1:100 (40x lens).



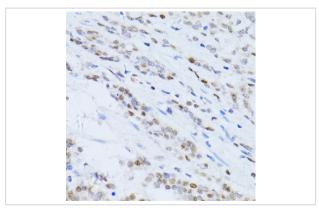
Immunohistochemistry of paraffin-embedded mouse brain using P21 at dilution of 1:100 (40x lens).



Western blot analysis of extracts from normal (control) and P21 knockout (KO) HeLa cells, using P21 at 1:500 dilution.



Western blot analysis of extracts of U-87MG cells, using P21 at 1:500 dilution.



Immunohistochemistry of paraffin-embedded human colon carcinoma using P21 at dilution of 1:100 (40x lens).

#### Background

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.

### **Published Papers**

el at., circHIPK3 prevents cardiac senescence by acting as a scaffold to recruit ubiquitin ligase to degrade HuR In Theranostics on 2022 Oct 31 by Fengzhi Ding, Lin Lu,et al..PMID:36438474, , (2022)

PMID:36438474

Note: This product is for in vitro research use only and is not intended for use in humans or animals.