# Anti-p21 Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P102241

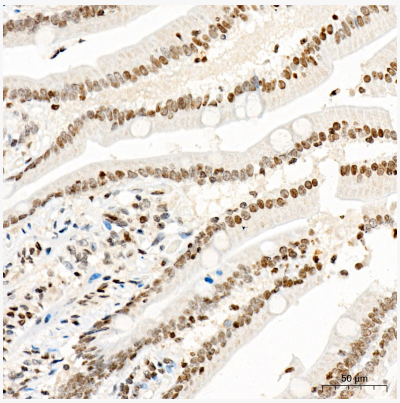
## Product Information

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|---|---|
| Application | WB, IHC-P, IF (Cell)/ICC, ELISA |
| Reactivity | Human, Mouse, Rat |
| Dilution | WB 1:500~1:1000; IHC-P 1:50~1:200; IF 1:50~1:200 |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthetic peptide corresponding to a sequence within amino acids 1-164 of human CDKN1A/p21CIP1 (NP_000380.1). |
| Format | Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-p21 Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures. |

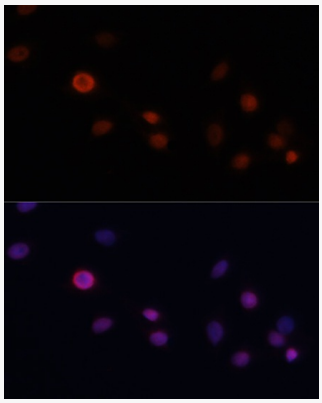
## Protein Information

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|---|---|
| Synonyms | P21; CIP1; SDI1; WAF1; CAP20; CDKN1; MDA-6; p21CIP1; CDKN1A/p21CIP1. |
| Calculated MW | Calculated MW: 18 kDa; Observed MW: 18 kDa(Mouse)/21 kDa(Human/Rat) |
| Uniprot ID | P38936 |
| Gene ID | 1026 |
| 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. |

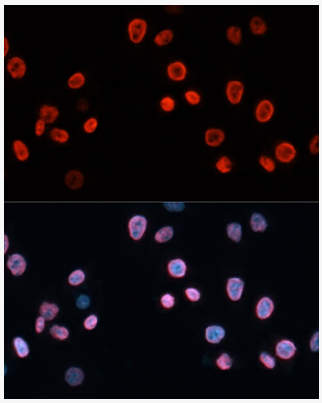
## Validation Images



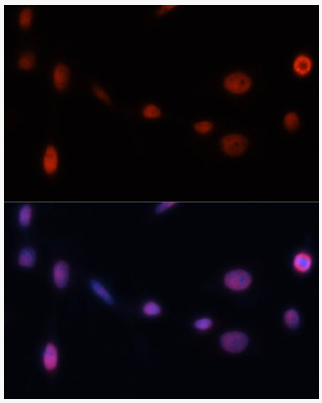
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using CDKN1A/p21CIP1 Rabbit pAb (P102241) at a dilution of 1:200 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



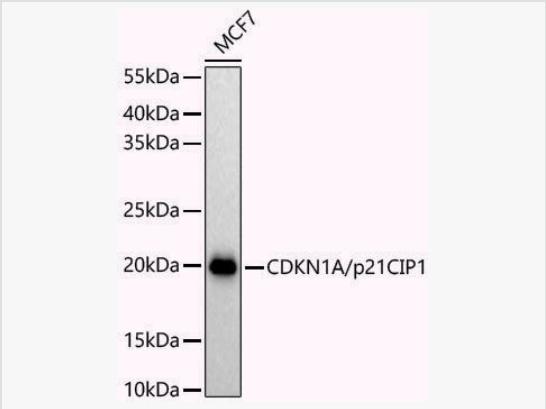
Immunofluorescence analysis of C6 cells using CDKN1A/p21CIP1 Rabbit pAb (P102241) at dilution of 1:100. Blue: DAPI for nuclear staining.



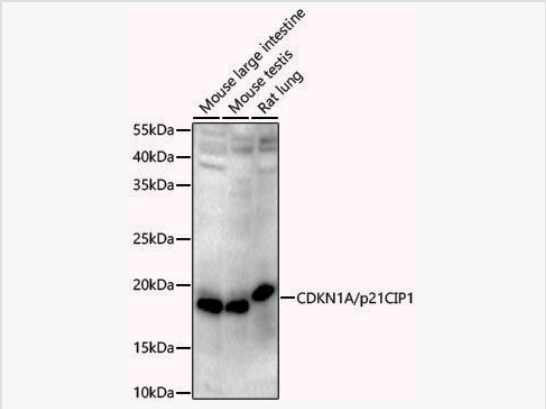
Immunofluorescence analysis of HeLa cells using CDKN1A/p21CIP1 Rabbit pAb (P102241) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using CDKN1A/p21CIP1 Rabbit pAb (P102241) at dilution of 1:100. Blue: DAPI for nuclear staining.




Western blot analysis of lysates from MCF7 cells, using CDKN1A/p21CIP1 Rabbit pAb (P102241) at 1:900 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 180s.




Western blot analysis of various lysates, using CDKN1A/p21CIP1 Rabbit pAb (P102241) at 1:900 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 180s.