Anti-p21 Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P105700

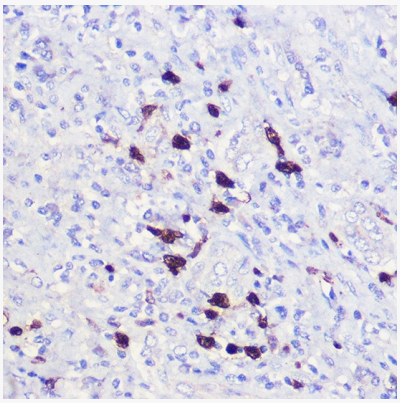
Product Information

Application	WB, IHC-P, IP, ELISA
Reactivity	Human, Mouse
Dilution	WB 1:500~1:1000; IHC-P 1:50~1:200; IP 0.5μg-4μg antibody for 200μg-400μg extracts of whole cells
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant fusion protein containing a sequence corresponding to 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.

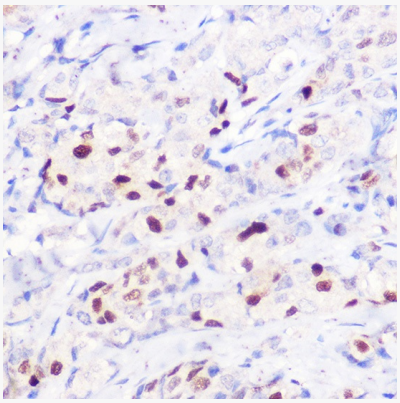
Protein Information

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)/21KD
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.

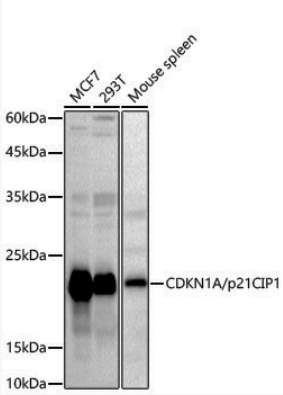
Validation Images



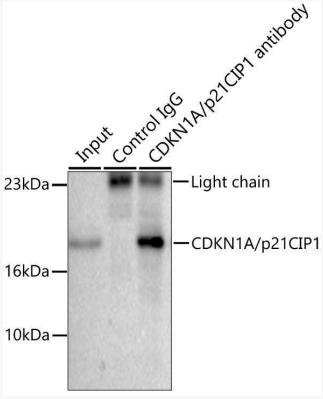
Immunohistochemistry analysis of paraffin-embedded Human liver using CDKN1A/p21CIP1 Rabbit pAb (P105700) at dilution of 1:100 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using CDKN1A/p21CIP1 Rabbit pAb (P105700) at dilution of 1:100 (40× lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Western blot analysis of various lysates using CDKN1A/p21CIP1 Rabbit pAb (P105700) at 1:1,000 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.



Immunoprecipitation of CDKN1A/p21CIP1 from 200 µg extracts of MCF7 cells was performed using 0.5 µg of CDKN1A/p21CIP1 Rabbit pAb (P105700). Rabbit IgG isotype control was used to precipitate the Control IgG sample. IP samples were eluted with 1X Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using CDKN1A/p21CIP1 Rabbit pAb (P105700) at a dilution of 1:500.