Leader in Biomolecular Solutions for Life Science

CDKN1A/p21CIP1 Rabbit pAb

Catalog No.: A2691 9 Publications



Basic Information

Observed MW

18kDa(Mouse)/21kDa(Human/Rat)

Calculated MW

18kDa

Category

Polyclonal Antibody

Applications

WB,IHC-P,IP,ELISA

Cross-Reactivity

Human, Mouse

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.

Recommended Dilutions

| WB | 1:500 - 1:1000 |
|-------|----------------|
| IHC-P | 1:50 - 1:200 |
| IP | 1:100 - 1:500 |

Immunogen Information

| Gene ID | Swiss Prot |
|---------|------------|
| 1026 | P38936 |

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-164 of human CDKN1A/p21CIP1 (NP 000380.1).

Synonyms

P21; CIP1; SDI1; WAF1; CAP20; CDKN1; MDA-6; p21CIP1; CDKN1A/p21CIP1

Contact

www.abclonal.com

Product Information

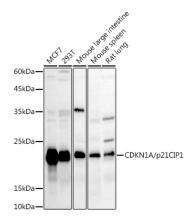
SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

Validation Data

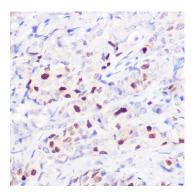


Western blot analysis of various lysates using CDKN1A/p21CIP1 Rabbit pAb (A2691) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 180s.



Immunohistochemistry analysis of CDKN1A/p21CIP1 in paraffin-embedded human breast cancer using CDKN1A/p21CIP1 Rabbit pAb (A2691) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.