

## Product datasheet for **TA374578**

### p21 (CDKN1A) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, IP, WB
Recommended Dilution:	WB,1:500 - 1:2000 IHC,1:50 - 1:200 IF,1:50 - 1:200 IP,1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-164 of human CDKN1A/p21CIP1 (NP_001207707.1).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	18kDa
Gene Name:	cyclin-dependent kinase inhibitor 1A
Database Link:	<a href="#">Entrez Gene 1026 Human P38936</a>



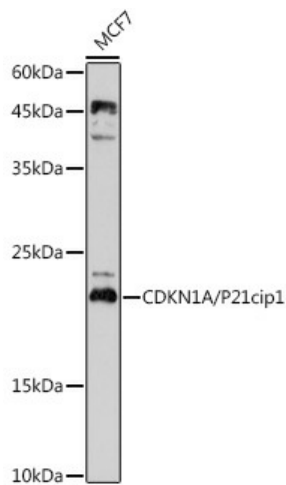
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**Background:**

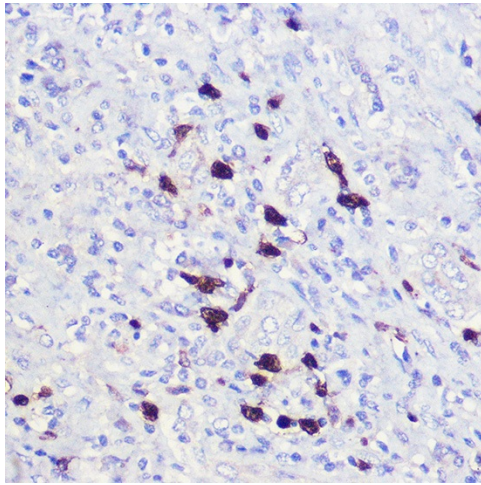
This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled 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.

**Synonyms:**

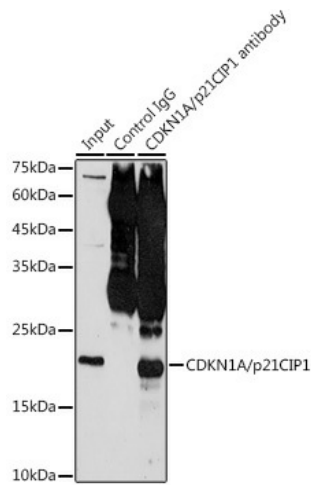
CAP20; CDKN1; CIP1; MDA-6; MDA6; OTTHUMP00000016298; P21; p21CIP1; p21Cip1/Waf1; PIC1; SDI1; WAF1

**Product images:**

Western blot analysis of extracts of MCF7 cells, using CDKN1A/P21cip1 antibody (TA374578) at 1:1000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit . | Exposure time: 180s.



Immunohistochemistry of paraffin-embedded human liver using CDKN1A/p21CIP1 Rabbit pAb (TA374578) 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.



Immunoprecipitation analysis of 300ug extracts of MCF7 cells using 3ug CDKN1A/p21CIP1 antibody (TA374578). Western blot was performed from the immunoprecipitate using CDKN1A/p21CIP1 antibody (TA374578) at a dilution of 1:500.