

## Allgemeine Informationen

<b>Katalog-Nr.:</b> 10355-1-AP	<b>GenBank-Zugangsnummer:</b> BC000275	<b>Reinigungsmethode:</b> Antigen-Affinitätsreinigung
<b>Größe:</b> 150ul , Konzentration: 900 µg/ml von Nanodrop;	<b>GeneID (NCBI):</b> 1026	<b>Empfohlene Verdünnungen:</b> WB 1:1000-1:4000 IP 0.5-4.0 ug für IP und 1:500-1:2000 für WB
<b>Wirt:</b> Kaninchen	<b>Vollständiger Name:</b> cyclin-dependent kinase inhibitor 1A (p21, Cip1)	<b>IHC 1:200-1:600</b> <b>IF 1:50-1:500</b>
<b>Isotyp:</b> IgG	<b>Berechnete Masse:</b> 21 kDa	
<b>Immunogen Katalognummer:</b> AG0368	<b>Beobachtete Masse:</b> 21 kDa	

## Anwendungen

**Geprüfte Anwendungen:**  
FC, IF, IHC, IP, WB, ELISA

**In Publikationen genannte Anwendungen:**  
CoIP, FC, IF, IHC, IP, WB

**Getestete Reaktivität:**  
Human

**Zitierte Arten:**  
Hausschwein, Human, Hund

**Hinweis-IHC: Antigendemaskierung mit TE-Puffer pH 9,0 empfohlen. (\*) Wahlweise kann die Antigendemaskierung auch mit Citratpuffer pH 6,0 erfolgen.**

**Positivkontrollen:**

**WB:** HUVEC-Zellen, HEK-293-Zellen, HeLa-Zellen, HepG2-Zellen, LNCaP-Zellen, MCF-7-Zellen, NCCIT-Zellen, THP-1-Zellen, U2OS-Zellen

**IP:** MCF-7-Zellen,

**IHC:** humanes Zervixkarzinomgewebe, humanes Kolonkarzinomgewebe, humanes Magenkrebsgewebe, humanes Mammakarzinomgewebe, humanes Nierengewebe, humanes Schilddrüsenkarzinomgewebe

**IF:** MCF-7-Zellen, Myotom eines Somiten bei E11.5-Gewebe

## Hintergrundinformationen

CDKN1A (p21, CIP1, WAF1) is a cyclin-dependent kinase inhibitor. CDKN1A binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at the G1 phase. The expression of CDKN1A is induced by wild-type but not mutant p53 protein, through which CDKN1A mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. CDKN1A can interact with proliferating cell nuclear antigen (PCNA), and plays a regulatory role in S phase DNA replication and DNA damage repair. CDKN1A was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of CDK2, and may be instrumental in the execution of apoptosis following caspase activation. Two alternatively spliced variants, which encode an identical protein, have been reported.

## Bemerkenswerte Veröffentlichungen

Verfasser	Pubmed ID	Journal	Anwendung
Jing Zhao	32986180	Biotechnol Lett	WB
Shengya Tian	31562192	Life Sci Alliance	WB
Wei Zhao	29212181	Oncotarget	WB

## Lagerung

**Lagerungsbedingungen:**

Bei -20°C lagern. Nach dem Versand ein Jahr lang stabil

**Lagerungspuffer:**

PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.

Aliquotieren ist nicht notwendig bei -20°C Lagerung

**\*\*\* 20ul-Größen enthalten 0.1% BSA**

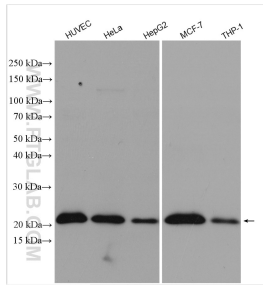
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

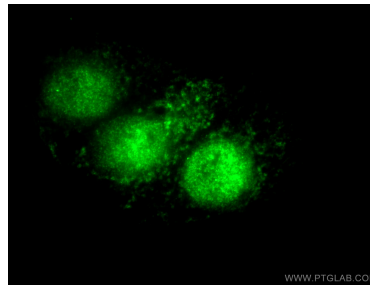
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

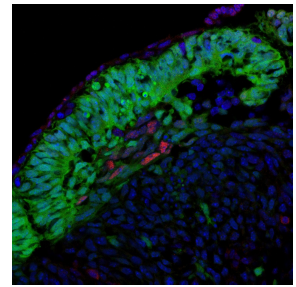
## Ausgewählte Validierungsdaten



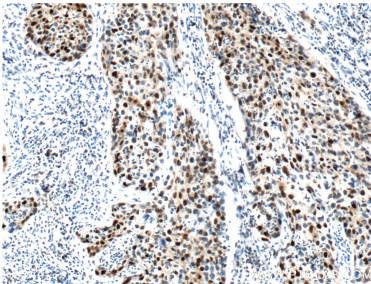
Various lysates were subjected to SDS PAGE followed by western blot with 10355-1-AP (P21 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



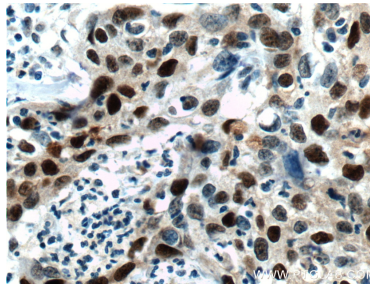
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using 10355-1-AP (P21;CDKN1A antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



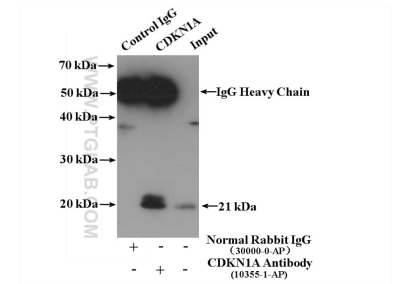
IF result of anti-p21 (CDKN1A, 10355-1-AP) in the myotome of a somite at E11.5 by Dr. Zalc A. and Dr. Relaix F. (Red = p21; Green=Pax3 from a GFP reporter; Blue=DAPI).



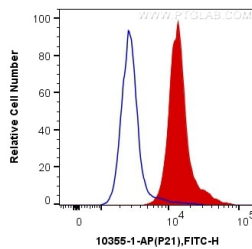
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 10355-1-AP (P21;CDKN1A Antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 10355-1-AP (P21;CDKN1A Antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-P21;CDKN1A (IP:10355-1-AP, 4ug; Detection:10355-1-AP 1:1000) with MCF-7 cells lysate 2800 ug.



$1 \times 10^6$  MCF-7 cells were intracellularly stained with 0.2 ug Anti-Human P21 (10355-1-AP) and CoraLite<sup>®</sup>488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).