



Catalog Number GTX112898 **Package:** 25 µl, 100 µl **Proclin** **Reference** (1)

Product Name p21 antibody

Full Name cyclin-dependent kinase inhibitor 1A (p21, Cip1)

Synonyms CAP20 antibody, CDKN1 antibody, CIP1 antibody, MDA-6 antibody, P21 antibody, SDI1 antibody, WAF1 antibody, p21CIP1 antibody, CDKN1A antibody, cyclin-dependent kinase inhibitor 1 antibody, melanoma differentiation associated protein 6 antibody, wild-type p53-activated fragment 1 antibody, DNA synthesis inhibitor antibody, CDK-interacting protein 1 antibody, CDK-interaction protein 1 antibody, cyclin-dependent kinase inhibitor 1A (p21, Cip1) antibody

Product Description Rabbit Polyclonal antibody to p21 (cyclin-dependent kinase inhibitor 1A (p21, Cip1))

Background This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 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 (PCNA), 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 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. [provided by RefSeq]

Host Rabbit

Clonality Polyclonal

Immunogen Recombinant fragment corresponding to a region within amino acids 1 and 164 of p21 (Uniprot ID#P38936)

Antigen Species Human

Species Reactivity Human, Chicken

Applications ICC/IF, IHC-P, WB

Application Note

	Suggested dilution	Protocol	Reference
ICC/IF	1:100-1:1000*		
IHC (Formalin-fixed paraffin-embedded sections)	1:100-1:1000*		
Western blot	1:500-1:3000*		

Not tested in other applications.

*Optimal dilutions/concentrations should be determined by the researcher.

Positive Controls HCT116 treated 30uM cisplatin 24hr

Predicted Target Size 18 kDa

Cellular Localization Cytoplasm , Nucleus

Form Supplied Liquid

Purification Purified by antigen-affinity chromatography.

Preservative Proclin

PreservativeConc 0.00025

Concentration 1 mg/ml

Storage Buffer 0.025% proclin/ 20% Glycerol in PBS

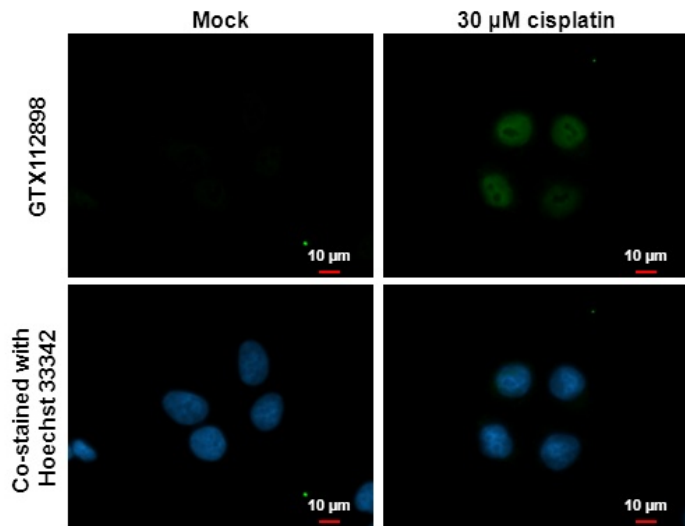
Storage Instruction Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Notes For *In vitro* laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

ResearchArea [Cancer](#) > [Apoptosis](#) > [Metastasis and Invasion](#) > [Invasion](#)
[Cancer](#) > [Cell cycle](#) > [Cell cycle inhibitors](#) > [Cip-kip](#)
[Cancer](#) > [Type of cancer](#) > [Brain](#) > [Glioma](#)

Application Reference

1. Ma G (2014) *Int J Biol Sci* 309-20



GTX112898 p21 antibody ICC/IF Image

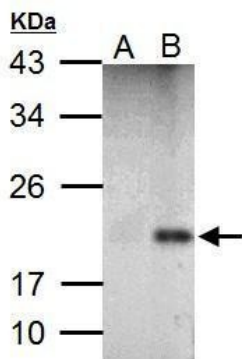
p21 antibody detects p21 protein at nucleus by immunofluorescent analysis.

Samples: HCT116 cells mock and treated with 30μM cisplatin for 24hr and were fixed in 4% paraformaldehyde at RT for 15 min.

Green: p21 protein stained by p21 antibody (GTX112898) diluted at 1:500.

Blue: Hoechst 33342 staining.

Scale bar = 10 μm.



GTX112898_40086_WB_HCT116 cisplatin.jpg

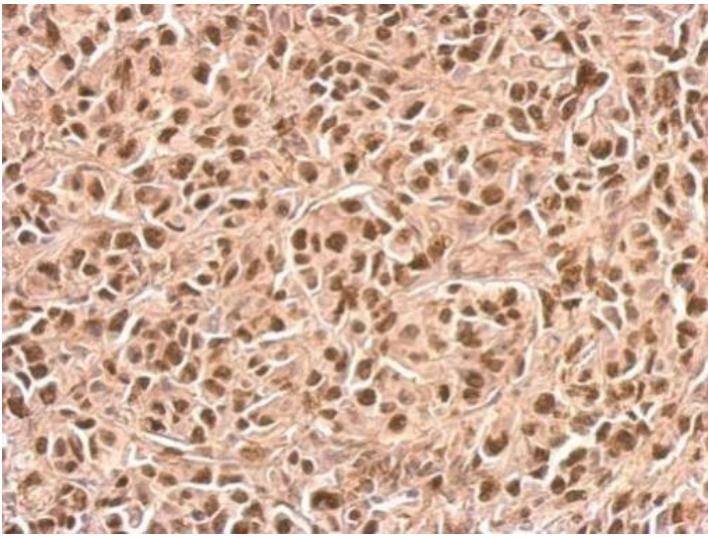
Sample (30 ug of whole cell lysate)

A: HCT116 cells with 30uM cisplatin treatment for 0hr

B: HCT116 cells with 30uM cisplatin treatment for 24hr

12% SDS PAGE

GTX112898 diluted at 1:1000



GTX112898_41010_IHC.jpg

p21 antibody detects CDKN1A protein at nucleus on SkHep1xenograft by immunohistochemical analysis.

Sample: Paraffin-embedded SkHep1xenograft.

p21 antibody (GTX112898) dilution: 1:500.