

Anti-p21/CIP1/WAF1 Antibody
Catalog # AN1874**Specification**

Anti-p21/CIP1/WAF1 Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	P38936
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG2a
Calculated MW	18119

Anti-p21/CIP1/WAF1 Antibody - Additional InformationGene ID **1026****Other Names**

Cyclin-dependent kinase inhibitor 1 CDK-interacting protein 1 Melanoma differentiation-associated protein 6 MDA-6 p21 CDKN1A CAP20, CDKN1, CIP1, MDA6, PIC1, SDI1, WAF1

Dilution

WB~~1:1000
IHC~~1:100~500
IF~~1:50~200

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-p21/CIP1/WAF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

Anti-p21/CIP1/WAF1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-p21/CIP1/WAF1 Antibody - Images



Western blot analysis of p21 expression in human endothelial cells (lanes 1 & 2). The blots were probed with mouse monoclonal anti-p21 at 1:250 (lane 1) and 1:1000 (lane 2).

Anti-p21/CIP1/WAF1 Antibody - Background

The tumor suppressor protein p21/CIP1/WAF1 acts as an inhibitor of cell cycle progression. It functions in stoichiometric relationships forming heterotrimeric complexes with cyclins and cyclin-dependent kinases. In association with CDK2 complexes, it serves to inhibit kinase activity and block progression through G1/S. However, p21 may also enhance assembly and activity in complexes of CDK4 or CDK6 and cyclin D. The carboxy-terminal region of p21 is sufficient to bind and inhibit PCNA, a subunit of DNA polymerase, and may coordinate DNA replication with cell cycle progression. Upon UV damage or during cell cycle stages when cdc2/cyclin B or CDK2/cyclin A are active, p53 is phosphorylated and upregulates p21 transcription via a p53-responsive element. Protein levels of p21 are downregulated through ubiquitination and proteasomal degradation.