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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 Information

Gene 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 Cytomety
- Cell Culture

Anti-p21/CIP1/WAF1 Antibody - Images

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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.