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# Anti-p21/CIP1/WAF1 Antibody

Catalog # AN1874

## Product Information

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|---|---|
| **Application** | WB, IHC, ICC, IP |
| **Primary Accession** | P38936 |
| **Host** | Mouse |
| **Clonality** | Mouse Monoclonal |
| **Isotype** | IgG2a |
| **Clone Names** | M513 |
| **Calculated MW** | 18119 |

## Additional Information

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|---|---|
| **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 ICC~~N/A IP~~N/A |
| **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 |

## 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.

## 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.