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Anti-p21/CIP1/WAF1 Antibody

Catalog # AN1874

Product Information

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

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 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'.