

Product datasheet for **TA389175**

CDKN1A Mouse Antibody [Clone ID: M513]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M513
Applications:	ICC, IHC, IP, WB
Recommended Dilution:	WB: 1:500 ICC: 1:50
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
Immunogen:	Clone M513 was generated from a full length recombinant human p21 protein. The antibody detects human p21.
Specificity:	The antibody detects a 21 kDa* protein corresponding to the apparent molecular mass of p21 on SDS-PAGE immunoblots of human endothelial cells (HUVEC), HeLa cells, and Fibroblasts. The antibody is also useful for immunoprecipitation and immunofluorescent labeling in human cells.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Antigen Affinity Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	21
Database Link:	P38936



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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.

Note:

Protein G purified tissue culture supernatant.