



# Mouse anti-Human P21 monoclonal antibody, clone 3H23 (CABT-B9262)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	Human p21 fusion protein
<b>Isotype</b>	IgG1, $\kappa$
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	3H23
<b>Purification</b>	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB; IHC-P; IP
<b>Format</b>	Liquid
<b>Concentration</b>	0.5 mg/ml
<b>Size</b>	100 $\mu$ g
<b>Buffer</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.
<b>Storage</b>	Store undiluted at 4°C.

## BACKGROUND

**Introduction** The p21 protein belongs to a class of tumor suppressors including p16 and p27 which control

progression through the cell cycle by inhibiting the activity of cyclin-cdk complexes. p21 is also known as senescent cell-derived inhibitor 1 (Sdi1), wild-type p53-activated fragment 1 (Waf1), Cdk-interacting protein 1 (Cip1), p21, and p53-regulated inhibitor of Cdks (Pic1). The 2.1 kb cDNA coding for p21 was first cloned from a library made from senescent normal human foreskin fibroblasts. When introduced into proliferating foreskin fibroblasts it causes inhibition of DNA synthesis and cell cycle arrest. The p21 mRNA is expressed at higher levels in senescent fibroblasts than in actively growing cells. The resultant protein has a calculated molecular weight of 18 kDa and runs at 21 kDa in SDS/PAGE. p21 is believed to function by inhibiting the kinase activity of the cyclin-cdk complexes to which it binds. p53 has been shown to cause the induction of p21 gene, presumably by recognizing a p53 binding site identified in the promoter of the p21 gene. Clone 3H23 recognizes human p21. A full-length human p21 fusion protein was expressed in bacteria and used as immunogen. Mice were immunized and hybridomas were selected for reactivity against p21 by ELISA and western blot analysis.

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**Keywords**

CDKN1A; cyclin-dependent kinase inhibitor 1A (p21, Cip1); P21; CIP1; SDI1; WAF1; CAP20; CDKN1; MDA-6; p21CIP1; cyclin-dependent kinase inhibitor 1; DNA synthesis inhibitor; CDK-interacting protein 1; CDK-interaction protein 1; wild-type p53-activated fragment 1; melanoma differentiation associated protein 6;

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## GENE INFORMATION

**Entrez Gene ID**

[1026](#)

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**UniProt ID**

[A0A024RCX5](#)

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