

Catalog Number: 24223-1, 24223-2

Amount: 50µg/50µl, 100µg/100µl

Swiss-Prot No. :P38936

Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl,0.02% sodium azide and 50% glycerol.

Storage/Stability: Store at -20°C/1 year

Immunogen: The antiserum was produced against synthesized peptide derived from Human CDKN1A **Purification:**The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Specificity/Sensitivity:CDKN1A Antibody detects endogenous levels of total CDKN1A

Reactivity: Human, Mouse, Rat

Applications:

Predicted MW: 21kd WB:1:500-2000 IHC:1:50-200

kDa 1 2 250-190-75-50-37-20-15Western blot analysis of extracts of various celllines, using CDKN1A antibody.

Background :

The tumor suppressor protein p21 Waf1/Cip1 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 is active, p53 is phosphorylated and upregulates p21 transcription via a p53-responsive element . Protein levels of p21 are downregulated through ubiquitination and proteasomal degradation .

