

## Product datasheet for **TA808128AM**

### **p21 (CDKN1A) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI5G1]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	OTI5G1
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 2-164 of human CDKN1A(NP_510867) produced in E.coli.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.5 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Biotin
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	17.9 kDa
Gene Name:	cyclin-dependent kinase inhibitor 1A
Database Link:	<a href="#">NP_510867</a> <a href="#">Entrez Gene 1026 Human</a> <a href="#">P38936</a>



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**Background:**

This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen (PCNA), a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of CDK2, and may be instrumental in the execution of apoptosis following caspase activation. Multiple alternatively spliced variants have been found for this gene. [provided by RefSeq, Nov 2010]

**Synonyms:**

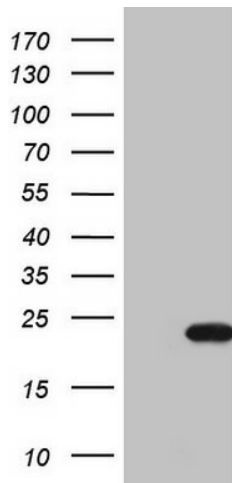
CAP20; CDKN1; CIP1; MDA-6; P21; p21CIP1; SDI1; WAF1

**Protein Families:**

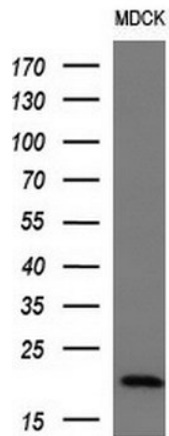
Druggable Genome

**Protein Pathways:**

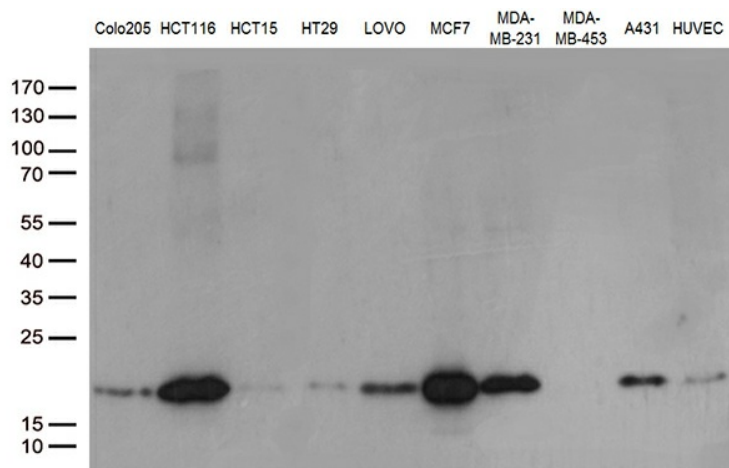
Bladder cancer, Cell cycle, Chronic myeloid leukemia, ErbB signaling pathway, Glioma, Melanoma, p53 signaling pathway, Pathways in cancer, Prostate cancer

**Product images:**

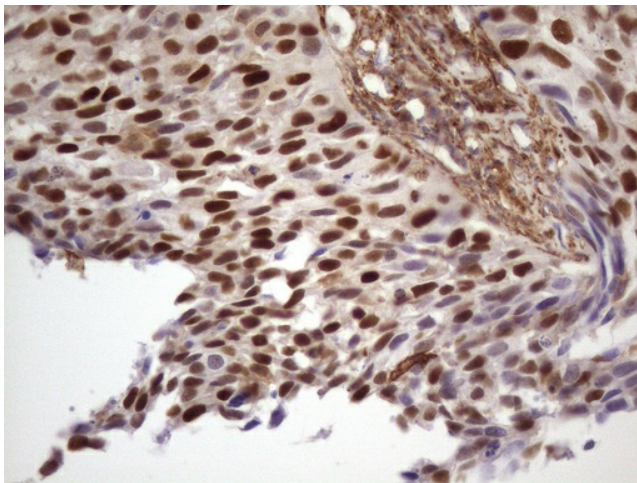
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CDKN1A ([RC201765], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CDKN1A (1:2000). Positive lysates [LY409213] (100ug) and [LC409213] (20ug) can be purchased separately from OriGene.



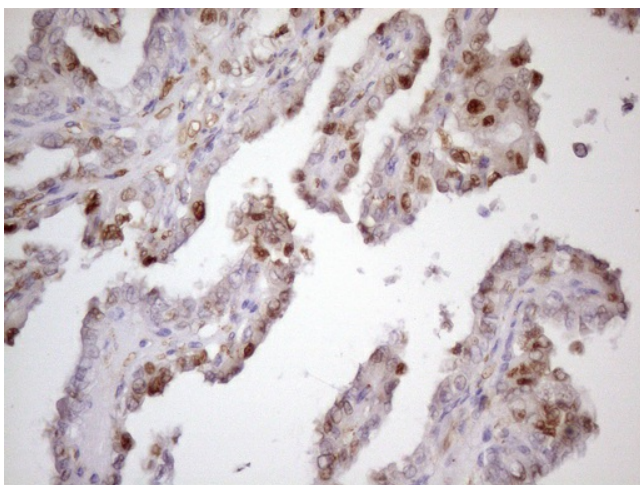
Western blot analysis of extracts (10ug) from 1 cell line by using anti-CDKN1A monoclonal antibody (1:200).



Western blot analysis of extracts (35ug) from 8 cell lines by using anti-CDKN1A monoclonal antibody (1:250).



Immunohistochemical staining of paraffin-embedded Carcinoma of Human kidney tissue using anti-CDKN1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA808128]) (1:150)



Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-CDKN1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA808128]) (1:150)