

## Product datasheet for **TA808164BM**

### **p21 (CDKN1A) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI7C8]**

#### **Product data:**

|                         |  |
|-------------------------|--|
| Product Type:           | Primary Antibodies   |
| Clone Name:             | OTI7C8   |
| Applications:           | IHC, WB  |
| Recommended Dilution:   | WB 1:2000, IHC 1:150   |
| Reactivity:             | Human  |
| Host:                   | Mouse  |
| Isotype:                | IgG2b  |
| 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.  |
| Concentration:          | 0.5 mg/ml  |
| Purification:           | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)            |
| Conjugation:            | HRP  |
| 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><br><a href="#">Entrez Gene 1026 Human</a><br><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:**

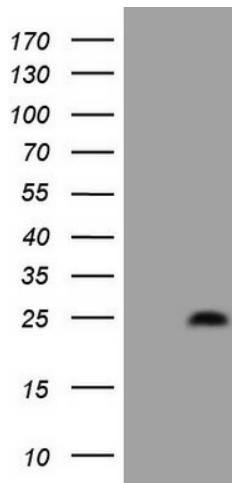
CAP20; CDKN1; CIP1; MDA-6; P21; p21CIP1; SDI1; WAF1

**Protein Families:**

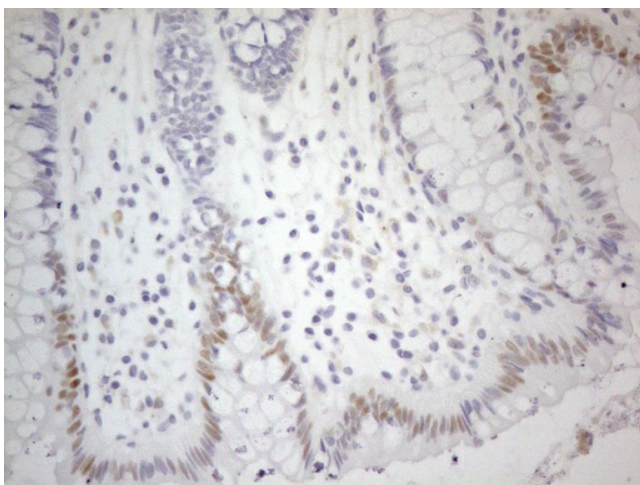
Druggable Genome

**Protein Pathways:**

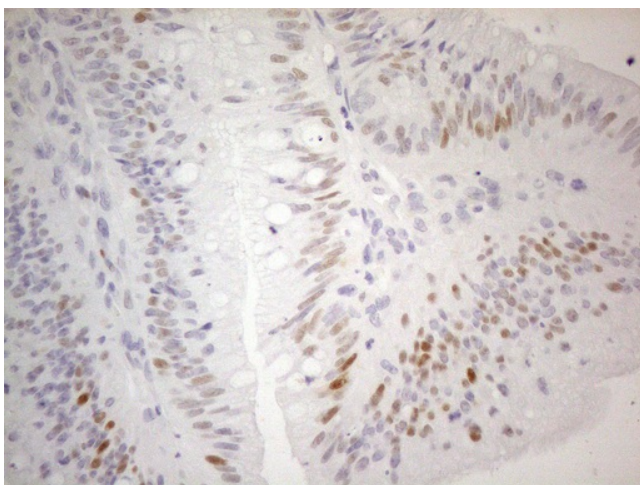
Bladder cancer, Cell cycle, Chronic myeloid leukemia, ErbB signaling pathway, Glioma, Melanoma, p53 signaling pathway, Pathways in cancer, Prostate cancer

**Product images:**

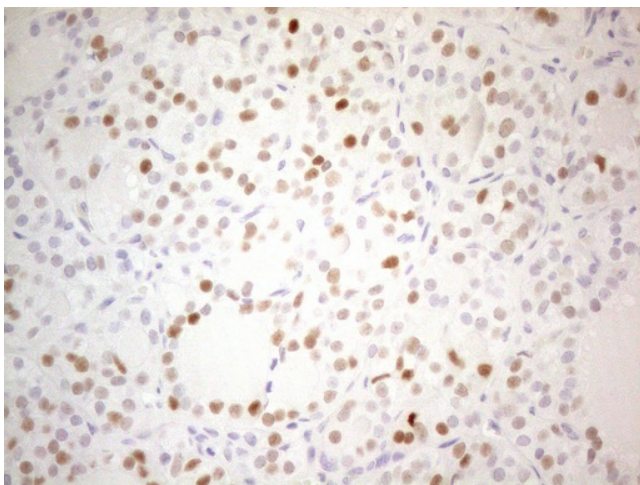
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CDKN1A ([RC201765], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CDKN1A (1:2000). Positive lysates [LY409213] (100ug)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



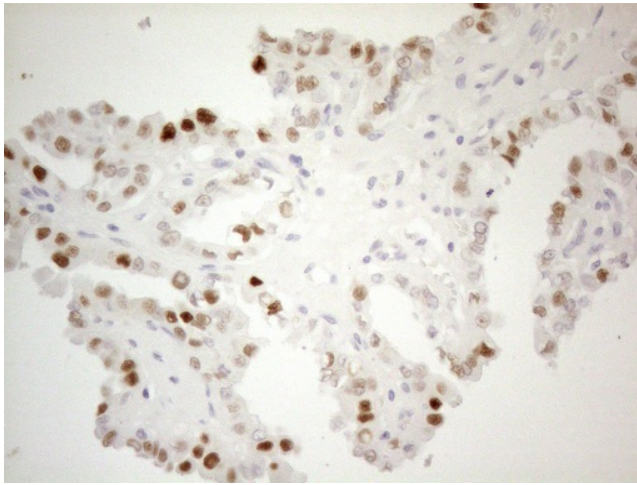
Immunohistochemical staining of paraffin-embedded Human colon tissue using anti-CDKN1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808164]) (1:150)



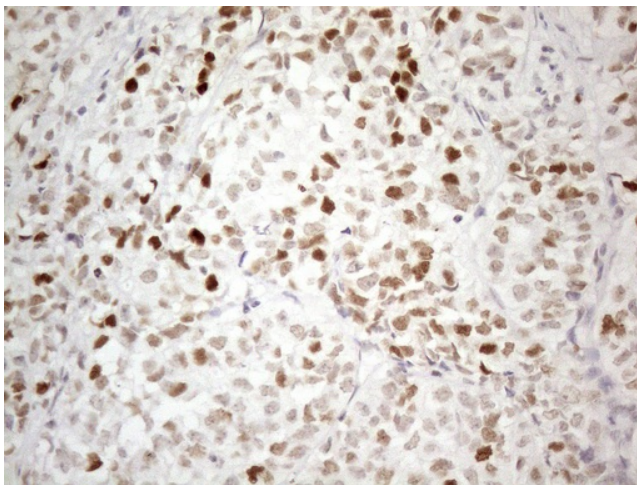
Immunohistochemical staining of paraffin-embedded Carcinoma of Human pancreas tissue using anti-CDKN1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808164]) (1:150)



Immunohistochemical staining of paraffin-embedded Human thyroid tissue using anti-CDKN1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808164]) (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 buffer (pH8.5) at 120°C for 3min, [TA808164]) (1:150)



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-CDKN1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA808164]) (1:150)