

### **Product datasheet for TA801874**

#### OriGene Technologies, Inc.

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# p16INK4A (CDKN2A) Mouse Monoclonal Antibody [Clone ID: OTI3G3]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3G3

**Applications:** IF, IHC, WB **Recommended Dilution:** IHC 1:150

Reactivity: Human

**Host:** Mouse

**Isotype:** IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human CDKN2A(NP\_000068) produced in E.coli.

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 16.4 kDa

**Gene Name:** cyclin-dependent kinase inhibitor 2A

Database Link: NP 000068

Entrez Gene 1029 Human

Q8N726





Background:

This gene generates several transcript variants which differ in their first exons. At least three alternatively spliced variants encoding distinct proteins have been reported, two of which encode structurally related isoforms known to function as inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame (ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, the E3 ubiquitin-protein ligase MDM2, a protein responsible for the degradation of p53. In spite of the structural and functional differences, the CDK inhibitor isoforms and the ARF product encoded by this gene, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. This gene is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene. [provided by RefSeq, Sep 2012]

Synonyms: ARF; CDK4I; CDKN2; CMM2; INK4; INK4A; MLM; MTS-1; MTS1; P14; P14ARF; P16; P16-INK4A;

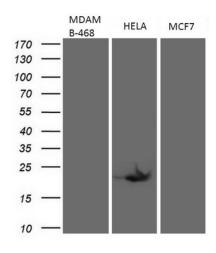
P16INK4

**Protein Families:** Druggable Genome

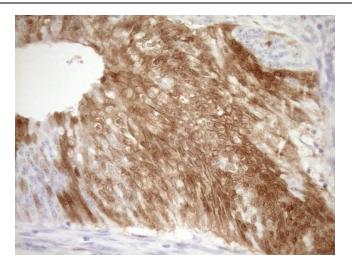
Protein Pathways: Bladder cancer, Cell cycle, Chronic myeloid leukemia, Glioma, Melanoma, Non-small cell lung

cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer

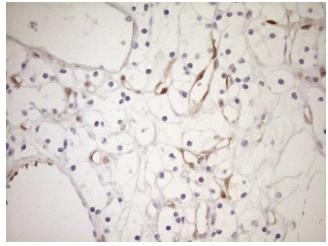
# **Product images:**



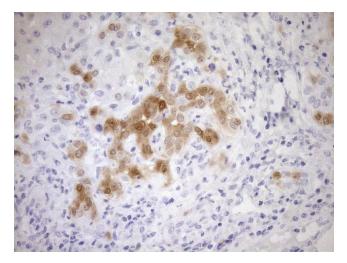
Western blot analysis of extracts (35ug) from 3 different cell lines by using anti-CDKN2A monoclonal antibody 1.MDAMB-468;2.Hela;3.MCF7) (1:500).



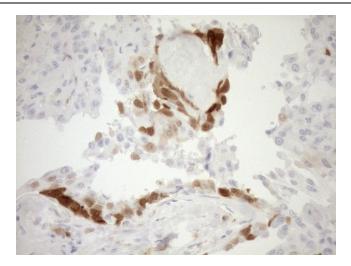
Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-CDKN2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA801874) (1:150)



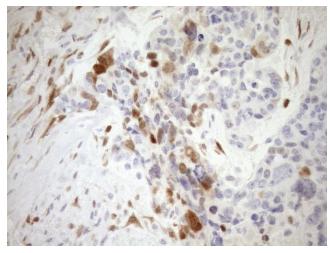
Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-CDKN2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA801874) (1:150)



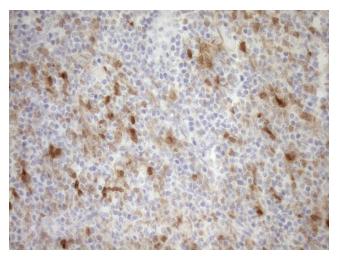
Immunohistochemical staining of paraffinembedded Carcinoma of Human liver tissue using anti-CDKN2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA801874) (1:150)



Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-CDKN2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA801874) (1:150)

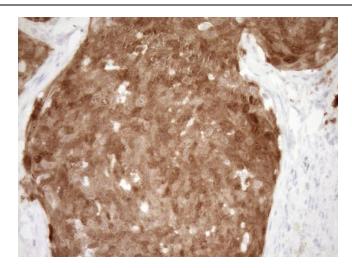


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-CDKN2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA801874) (1:150)

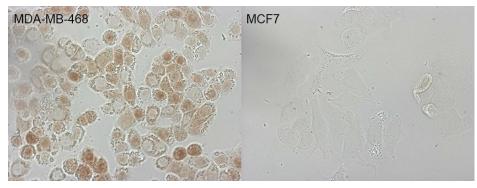


Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-CDKN2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA801874) (1:150)





Immunohistochemical staining of paraffinembedded Carcinoma of Human Cervix Uterus using anti-CDKN2A mouse monoclonal antibody. (Heat-induced epitope retrieval by Tris-EDTA (1:150)



Immunocytochemistry staining of MDA-MB-468 cells using anti-CDKN2A mouse monoclonal antibody (TA801874). The right is MCF7 cells as negative control (1:400).