

#### OriGene Technologies, Inc.

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# Product datasheet for TA805237M

# p16INK4A (CDKN2A) Mouse Monoclonal Antibody [Clone ID: OTI5H5]

### **Product data:**

Product Type:	Primary Antibodies	
Clone Name:	OTI5H5	
Applications:	IHC, WB	
Recommended Dilution:	WB 1:200 - 1:1000, IHC 1:150	
Reactivity:	Human	
Host:	Mouse	
lsotype:	lgG1	
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:	<u>NP_000068</u> <u>Entrez Gene 1029 Human</u> <u>Q8N726</u>	



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# CRIGENE p16INK4A (CDKN2A) Mouse Monoclonal Antibody [Clone ID: OTI5H5] – TA805237M

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

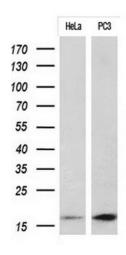
**Protein Pathways:** Bladder cancer, Cell cycle, Chronic myeloid leukemia, Glioma, Melanoma, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer

### **Product images:**

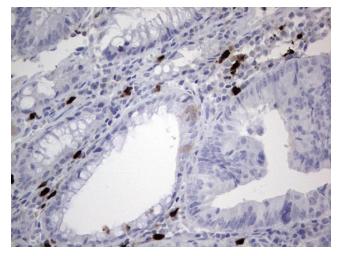
170	-	
130	-	
100	-	
70	-	
55		
40		
35	-	
25	-	
15	-	•
10	-	

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CDKN2A ([RC220937], 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-CDKN2A. Positive lysates [LY400022] (100ug) and [LC400022] (20ug) can be purchased separately from OriGene.

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Western blot analysis of extracts (10ug) from 2 different cell lines by using anti-CDKN2A monoclonal antibody at 1:200.



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-CDKN2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

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