

## **Product datasheet for CF808505**

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### p21 (CDKN1A) Mouse Monoclonal Antibody [Clone ID: OTI2D3]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI2D3

Applications: WB

Recommended Dilution: WB 1:2000

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:** Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**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: 17.9 kDa

**Gene Name:** cyclin dependent kinase inhibitor 1A

Database Link: NP 510867

Entrez Gene 1026 Human

P38936





#### 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]

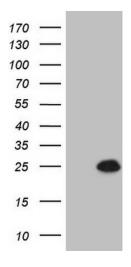
Synonyms: CAP20; CDKN1; CIP1; MDA-6; P21; p21CIP1; SDI1; WAF1

**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.