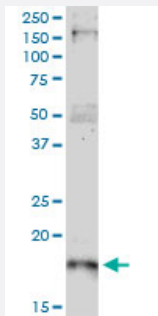


CDKN1A monoclonal antibody (M02), clone 2F1

Catalog # H00001026-M02

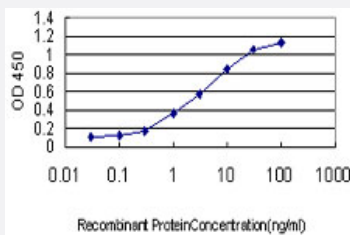
Size 100 ug

Applications



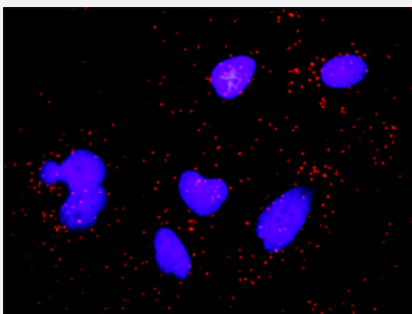
Western Blot (Tissue lysate)

CDKN1A monoclonal antibody (M02), clone 2F1. Western Blot analysis of CDKN1A expression in human liver.



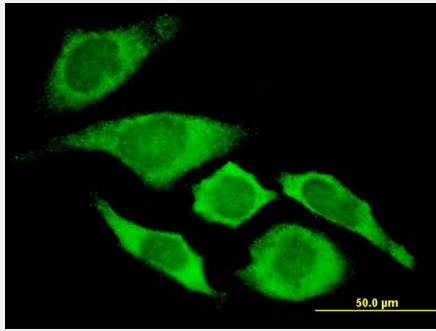
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CDKN1A is approximately 0.1ng/ml as a capture antibody.



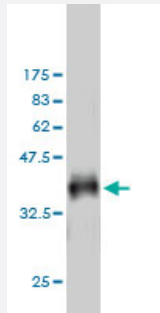
In situ Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between CASP3 and CDKN1A. HeLa cells were stained with anti-CASP3 rabbit purified polyclonal 1:1200 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Immunofluorescence

Immunofluorescence of monoclonal antibody to CDKN1A on HeLa cell .
[antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (36.74 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant CDKN1A.
Immunogen	CDKN1A (AAH00312.1, 65 a.a. ~ 164 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	WERVRGLGLPKLYLPTGPRRGRDELGGGRRPGTSPALLQGTAEDHVDLSLSCTLVPRSGEQA EGSPGGPGDSQGRKRRQTSMTDFYHSKRRLIFSRRKP
Host	Mouse
Reactivity	Human
Isotype	IgG1 kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Tissue lysate)

CDKN1A monoclonal antibody (M02), clone 2F1. Western Blot analysis of CDKN1A expression in human liver.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CDKN1A is approximately 0.1ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- In situ* Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between CASP3 and CDKN1A. HeLa cells were stained with anti-CASP3 rabbit purified polyclonal 1:1200 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

- Immunofluorescence

Immunofluorescence of monoclonal antibody to CDKN1A on HeLa cell . [antibody concentration 10 ug/ml]

Gene Info — CDKN1A

Entrez GeneID [1026](#)

GeneBank Accession# [NM_000389](#)

Protein Accession# [AAH00312.1](#)

Gene Name CDKN1A

Gene Alias CAP20, CDKN1, CIP1, MDA-6, P21, SDI1, WAF1, p21CIP1

Gene Description cyclin-dependent kinase inhibitor 1A (p21, Cip1)

Omim ID [116899](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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. Two alternatively spliced variants, which encode an identical protein, have been reported. [provided by RefSeq]

Other Designations

CDK-interaction protein 1|DNA synthesis inhibitor|OTTHUMP00000016298|cyclin-dependent kinase inhibitor 1A|melanoma differentiation associated protein 6|wild-type p53-activated fragment 1

Publication Reference

- [Increase of Intracellular Cyclic Amp by PDE4 Inhibitors Affects HepG2 Cell Cycle Progression and Survival.](#)

Massimi M, Cardarelli S, Galli F, Giardi MF, Ragusa F, Panera N, Cinque B, Cifone MG, Biagioni S, Giorgi M.

Journal of Cellular Biochemistry 2017 Jun; 118(6):1401.

Application: WB, Human, HepG2 cells

- [Phospho-ΔNp63α is a key regulator of the cisplatin-induced microRNAome in cancer cells.](#)

Huang Y, Chuang A, Hao H, Talbot C, Sen T, Trink B, Sidransky D, Ratovitski E.

Cell Death and Differentiation 2011 Jul; 18(7):1220.

Application: WB-Tr, Human, JHU-029 cells

Pathway

- [Bladder cancer](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [ErbB signaling pathway](#)
- [Glioma](#)
- [Melanoma](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)

- [Prostate cancer](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Colorectal Neoplasms](#)
- [Diabetes Mellitus](#)
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- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)

- [Papillomavirus Infections](#)
- [Pharyngeal Neoplasms](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Radiation Injuries](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)