

### CCND2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CCND2. Catalog # AT1419a

## **Specification**

## CCND2 Antibody (monoclonal) (M01) - Product Information

**Application** WB **Primary Accession** P30279 BC010958 Other Accession Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 kappa Calculated MW 33067

### CCND2 Antibody (monoclonal) (M01) - Additional Information

#### Gene ID 894

#### **Other Names**

G1/S-specific cyclin-D2, CCND2

### Target/Specificity

CCND2 (AAH10958, 190 a.a.  $\sim$  289 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

#### **Dilution**

WB~~1:500~1000

### **Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2.

## Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

### **Precautions**

CCND2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

# CCND2 Antibody (monoclonal) (M01) - Protocols

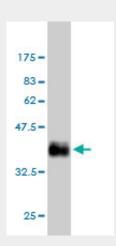
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

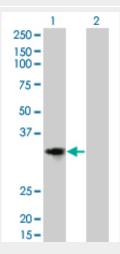


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## CCND2 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa).



Western Blot analysis of CCND2 expression in transfected 293T cell line by CCND2 monoclonal antibody (M01), clone 3B10.

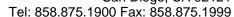
Lane 1: CCND2 transfected lysate(33.1 KDa).

Lane 2: Non-transfected lysate.

### CCND2 Antibody (monoclonal) (M01) - Background

The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with and functions as a regulatory subunit of CDK4 or CDK6, whose activity is required for cell cycle G1/S transition. This protein has been shown to interact with and be involved in the phosphorylation of tumor suppressor protein Rb. Knockout studies of the homologous gene in mouse suggest the essential roles of this gene in ovarian granulosa and germ cell proliferation.







High level expression of this gene was observed in ovarian and testicular tumors.

## CCND2 Antibody (monoclonal) (M01) - References

An approach based on a genome-wide association study reveals candidate loci for narcolepsy. Shimada M, et al. Hum Genet, 2010 Oct. PMID 20677014. Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility hot-spot. Johnatty SE, et al. PLoS Genet, 2010 Jul 8. PMID 20628624.CCND2 polymorphisms associated with clearance of HBV Infection. Park TJ, et al. | Hum Genet, 2010 Jul. PMID 20414251.Is cyclin D2 a marker of B-cLL cell activation? Kosmaczewska A, et al. Oncol Res, 2009. PMID 20066902.Cyclin D2 and the CDK substrate p220(NPAT) are required for self-renewal of human embryonic stem cells. Becker KA, et al. J Cell Physiol, 2010 Feb. PMID 19890848.