

## **Cyclin D1 Monoclonal Antibody**

Catalog No: YM0176

Reactivity: Human

**Applications:** WB;ELISA

Target: Cyclin D1

**Fields:** >>Endocrine resistance;>>FoxO signaling pathway;>>Cell cycle;>>p53

signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling

pathway;>>Cellular senescence;>>Wnt signaling pathway;>>Hedgehog signaling

pathway;>>Apelin signaling pathway;>>Hippo signaling pathway;>>Focal

adhesion;>>Tight junction;>>JAK-STAT signaling pathway;>>Prolactin signaling

pathway;>>Thyroid hormone signaling pathway;>>Oxytocin signaling

pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Cushing

syndrome;>>Alcoholic liver disease;>>Hepatitis C;>>Measles;>>Human cytomegalovirus infection;>>Human papillomavirus infection;>>Human T-cell

leukemia virus 1 infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Viral

carcinogenesis;>>Proteoglycans in cancer;>>MicroRNAs in cancer;>>Chemical

carcinogenesis - receptor activation;>>Colorectal cancer;>>Pancreatic cancer;>>Endometrial cancer;>>Glioma;>>Prostate cancer;>>Thyroid

cancer;>>Melanoma;>>Bla

Gene Name: CCND1

**Protein Name:** G1/S-specific cyclin-D1

Human Gene Id: 595

**Human Swiss Prot** P24385

No:

Mouse Swiss Prot P25322

No:

**Immunogen:** Purified recombinant fragment of human Cyclin D1 expressed in E. Coli.

**Specificity:** Cyclin D1 Monoclonal Antibody detects endogenous levels of Cyclin D1 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

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**Source:** Monoclonal, Mouse

**Dilution:** WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.

**Purification:** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 34kD

**Cell Pathway:** Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;p53;WNT;WNT-T CELLFocal

adhesion; Jak STAT; Pathways in cancer; Colorectal cancer; Pancreatic

cancer; Endometrial cancer; Glioma; Prostate cancer; Thyroid cancer; Melanoma; Bla

**P References:** 1. J Orthop Sci. 2009 Sep;14(5):623-30.

2. Mod Pathol. 2010 Feb;23(2):225-34.

**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 throughout 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 tumor suppressor protein Rb and the expression of this gene is regulated positively by Rb. Mutations, amplification and overexpression of this gene, which alters cell cycle progression, are observed frequently in a variety of tumors and may

contribute to tumorigenesis. [provided by RefSeq, Jul 2008],

**Function:** disease:A chromosomal aberration involving CCND1 may be a cause of B-

lymphocytic malignancy, particularly mantle-cell lymphoma (MCL). Translocation t(11;14)(q13;q32) with immunoglobulin gene regions. Activation of CCND1 may be oncogenic by directly altering progression through the cell cycle.,disease:A chromosomal aberration involving CCND1 may be a cause of multiple myeloma [MIM:254500]. Translocation t(11;14)(q13;q32) with the lgH locus.,disease:A chromosomal aberration involving CCND1 may be a cause of parathyroid adenomas [MIM:168461]. Translocation t(11;11)(q13;p15) with the parathyroid hormone (PTH) enhancer.,function:Essential for the control of the cell cycle at the G1/S (start) transition.,online information:The Singapore human mutation and polymorphism database,PTM:Following DNA damage it is ubiquitinated by some

SCF (SKP1-cullin-F-box) protein ligase complex containing FBXO31.

Subcellular Location:

Nucleus . Cytoplasm . Nucleus membrane . Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated to the nucleus  $\,$ 

through interaction with KIP/CIP family members. .

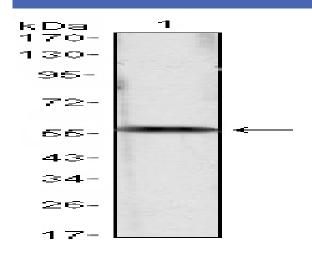
Brain, Placenta, Tongue,



## **Expression:**



## **Products Images**



Western Blot analysis using Cyclin D1 Monoclonal Antibody against CCND1-hlgGFc transfected HEK293 cell lysate.