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Anti-Cyclin D2 Antibody
Catalog # ABO10603

Specification

Anti-Cyclin D2 Antibody - Product Information

Application	**WB**
Primary Accession	P30279
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for G1/S-specific cyclin-D2(CCND2) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Cyclin D2 Antibody - Additional Information

Gene ID 894

Other Names
G1/S-specific cyclin-D2, CCND2

Calculated MW
33067 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Nucleus . Cytoplasm . Membrane . Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated into the nucleus through interaction with KIP/CIP family members. .

Protein Name
G1/S-specific cyclin-D2

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human CCND2(46-60aa CVQKDIQPYMRRMVA), identical to the related rat and mouse sequences.

Purification
Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the cyclin family. Cyclin D subfamily.

Anti-Cyclin D2 Antibody - Protein Information

Name CCND2 {ECO:0000303|PubMed:1386336, ECO:0000312|HGNC:HGNC:1583}

Function
Regulatory component of the cyclin D2-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition (PubMed:8114739, PubMed:18827403). Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase (PubMed:8114739, PubMed:18827403). Hypophosphorylates RB1 in early G(1) phase (PubMed:8114739, PubMed:18827403). Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals (PubMed:8114739, PubMed:18827403).

Cellular Location
Nucleus. Cytoplasm. Nucleus membrane. Note=Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated into the nucleus through interaction with KIP/CIP family members

Anti-Cyclin D2 Antibody - 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

Anti-Cyclin D2 Antibody - Images

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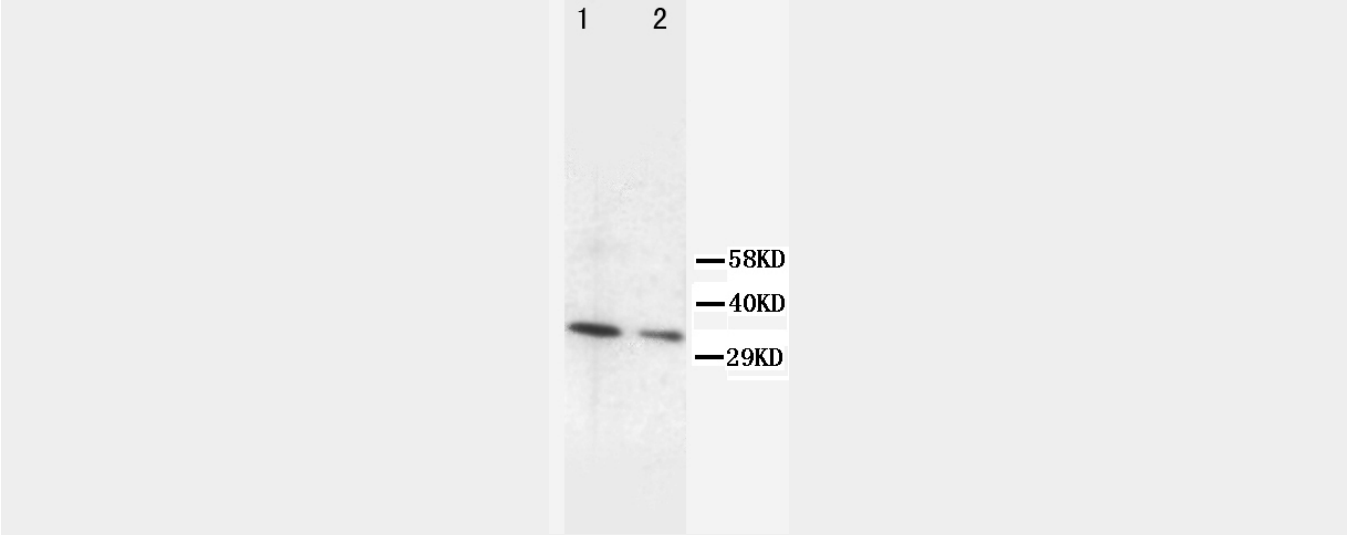

Anti-Cyclin D2 antibody, ABO10603, Western blottingLane 1: SMMC Cell LysateLane 2: JURKAT Cell Lysate

Anti-Cyclin D2 Antibody - Background

Cyclin D2, also known as CCND2, is a human gene. 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. Cyclin D1, Cyclin D2 and Cyclin D3 are the members of the cyclin family. Cyclin D2 mapped to 12p13, since the CCND1 gene is on 11q13, this may be another bit of evidence of the homology of chromosomes 11 and 12. Choi D et al proved the expression of pseudogene cyclin D2 mRNA in the human ovary increases with age, which may be a novel marker for decreased ovarian function associated with the aging process. And 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.