

CDK4 Antibody

Rabbit mAb Catalog # AP90827

Product Information

Application WB, IHC, IF, FC, ICC, IHF

Primary Accession
Reactivity
Human
Clonality
Monoclonal

Other Names Cyclin-dependent kinase 4; Cell division protein kinase 4; PSK-J3; PSKJ3; CDK4;

CMM 3;

IsotypeRabbit IgGHostRabbitCalculated MW33730

Additional Information

Dilution WB 1:1000~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human CDK4

Description Cyclin-dependent kinase activity is regulated by T-loop phosphorylation

(Thr172 in the case of CDK4), by the abundance of their cyclin partners, and by association with CDK inhibitors of the Cip/Kip or INK family of proteins. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and

antimitogenic signals.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name CDK4

Function Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that

phosphorylate and inhibit members of the retinoblastoma (RB) protein family

including RB1 and regulate the cell-cycle during G(1)/S transition.

Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its

transcriptional activity. Component of the ternary complex, cyclin

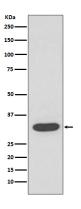
D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin

D-CDK4 complex.

Cellular Location

Cytoplasm. Nucleus. Nucleus membrane. Note=Cytoplasmic when non-complexed Forms a cyclin D-CDK4 complex in the cytoplasm as cells progress through G(1) phase. The complex accumulates on the nuclear membrane and enters the nucleus on transition from G(1) to S phase. Also present in nucleoli and heterochromatin lumps. Colocalizes with RB1 after release into the nucleus.

Images



Western blot analysis of CDK4 expression in Hela cell lysate.

Image not found: 202311/AP90827-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human stomach cancer, using CDK4 Antibody.

Image not found: 202311/AP90827-IF.jpg

Immunofluorescent analysis of MCF7 cells, using CDK4 Antibody.

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