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CDK4 Antibody

Rabbit mAb
Catalog # AP90827

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	P11802
Reactivity	Human
Clonality	Monoclonal
Other Names	Cyclin-dependent kinase 4; Cell division protein kinase 4; PSK-J3; PSKJ3; CDK4; CMM 3;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	33730

Additional Information

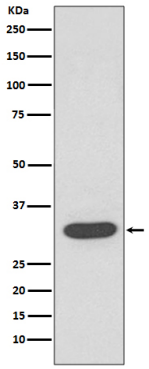
Dilution	WB 1:1000~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human CDK4
Description	Cyclin-dependent kinase activity is regulated by T-loop phosphorylation (Thr172 in the case of CDK4), by the abundance of their cyclin 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.