

CDK4 Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS12032

Specification

CDK4 Antibody (C-Terminus) - Product Information

Application IHC
Primary Accession P11802

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 34kDa KDa

CDK4 Antibody (C-Terminus) - Additional Information

Gene ID 1019

Other Names

Cyclin-dependent kinase 4, 2.7.11.22, Cell division protein kinase 4, PSK-J3, CDK4

Target/Specificity

Peptide mapping to the carboxy terminus of mouse Cdk4

Reconstitution & Storage

Store undiluted at 4 degrees C. Do not freeze.

Precautions

CDK4 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CDK4 Antibody (C-Terminus) - 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.

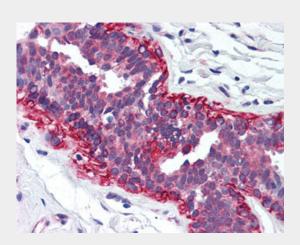
Volume 50 μl

CDK4 Antibody (C-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CDK4 Antibody (C-Terminus) - Images



Anti-CDK4 antibody IHC of human breast.

CDK4 Antibody (C-Terminus) - Background

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.

CDK4 Antibody (C-Terminus) - References

Hanks S.K., et al. Submitted (FEB-1987) to the EMBL/GenBank/DDBJ databases. Elkahloun A.G., et al. Genomics 42:295-301(1997). Wolfel T., et al. Science 269:1281-1284(1995).





Zuo L., et al. Nat. Genet. 12:97-99(1996). Ota T., et al. Nat. Genet. 36:40-45(2004).