

Rabbit anti-Human CDK4 Polyclonal Antibody | anti-CDK4 antibody

Anti-CDK4 Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA254380	Rabbit	Human	Immunoprecipitation, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

CDK4; Polyclonal Antibody; Anti-CDK4 Antibody; Rabbit Polyclonal; CDK4 Antibody; Rabbit PAb; Antigen Affinity Purified; cyclin-dependent kinase 4; Anti-CMM3 Antibody; Anti-PSK-J3 Antibody; anti-CDK4 antibody

PRODUCT SPECIFICATIONS

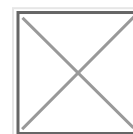
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human CDK4
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-CDK4 antibody	IP (Immunoprecipitation), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to the N-terminus of the Human CDK4
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with a synthetic peptide corresponding to the N-terminus of the Human CDK4, and purified by antigen affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



IP (Immunoprecipitation)

CDK4 was immunoprecipitated using: Lane A: 0.5 mg 293T Whole Cell Lysate Lane B: 0.5 mg MCF-7 Whole Cell Lysate 4 uL anti-CDK4 rabbit polyclonal antibody and 15 uL of 50 % Protein G agarose. Primary antibody: Anti-CDK4 rabbit polyclonal antibody, at 1:100 dilution Secondary antibody: DyLight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution Developed using the odyssey technique. Performed under reducing conditions. Predicted band size: 34 kDa Observed band size: 34 kDa



IF (Immunofluorescence)

Immunofluorescence staining of CDK4 in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-human CDK4 polyclonal antibody (1:1000) at 4 degree C overnight. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-rabbit IgG secondary antibody (green). Positive staining was localized to cytoplasm and nucleus.



IHC (Immunohistochemistry)

Immunochemical staining of human CDK4 in human breast with rabbit polyclonal antibody (1:1000, formalin-fixed paraffin embedded sections).



IHC (Immunohistochemistry)

Immunochemical staining of human CDK4 in human prostatic carcinoma with rabbit polyclonal antibody (1:1000, formalin-fixed paraffin embedded sections).



WB (Western Blot)

Anti-CDK4 rabbit polyclonal antibody at 1:500 dilution
Lane A: 293 Whole Cell Lysate
Lysates/proteins at 30 ug per lane.
Secondary: Goat Anti- Rabbit IgG H&L (Dylight 800) at 1/10000 dilution.
Developed using the Odyssey technique.
Performed under reducing conditions.
Predicted band size: 34 kDa
Observed band size: 34 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-CDK4 antibody	CDK4 is a member of the Ser/Thr protein kinase family. It is highly similar to the gene products of <i>S. cerevisiae</i> cdc28 and <i>S. pombe</i> cdc2. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of CDK4 is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). CDK4 was shown to be responsible for the phosphorylation of retinoblastoma gene product. CDK4 is the 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 mitogenic and antimitogenic signals. CDK4 has been shown to be mutated in some types of cancer, whilst a chromosomal rearrangement can lead to Cdk6 overexpression in lymphoma, leukemia and melanoma.
Product Categories/Family for anti-CDK4 antibody	Cancer Drug Targets ; p53 Pathway
References	Stepanova L, et al. (1996) Mammalian p50Cdc37 is a protein kinase-targeting subunit of Hsp90 that binds and stabilizes Cdk4. <i>Genes Dev.</i> 10(12):1491-502. Lamphere L, et al. (1997) Interaction between Cdc37 and Cdk4 in human cells. <i>Oncogene.</i> 14(16): 1999-2004. Dai K, et al. (1996) Physical interaction of mammalian CDC37 with CDK4. <i>J Biol Chem.</i> 271(36): 22030-4. Sugimoto M, et al. (1999) Regulation of CDK4 activity by a novel CDK4-binding protein, p34SEI-1. <i>Genes Dev.</i> 13(22):3027-33.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502735
NCBI GeneID	1019
NCBI Accession #	NP_000066.1
NCBI GenBank Nucleotide #	NM_000075.3
UniProt Accession #	P11802 ; O00576 ; Q6FG61
Molecular Weight	34kDa
NCBI Official Full Name	cyclin-dependent kinase 4
NCBI Official Synonym Full Names	cyclin-dependent kinase 4
NCBI Official Symbol	CDK4
NCBI Official Synonym Symbols	CMM3; PSK-J3

NCBI Protein Information	cyclin-dependent kinase 4; cell division protein kinase 4
UniProt Protein Name	Cyclin-dependent kinase 4
UniProt Gene Name	CDK4
UniProt Entry Name	CDK4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/cdk4-antibody-immunoprecipitation-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/254380>