

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

CDK4 Antibody (C-term)

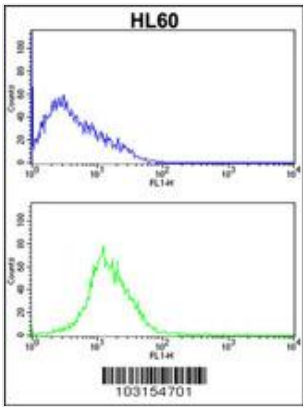
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA28747	Rabbit	Human	Flow Cytometry, Functional Assay, ELISA, Immunohistochemistry, Western Blot, Immunofluorescence

PRODUCT SYNONYMS

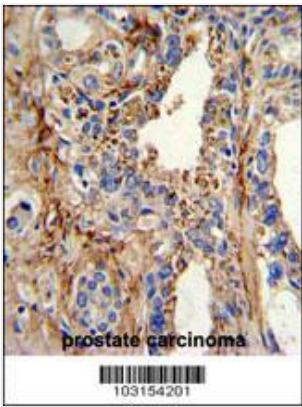
CDK4; Polyclonal Antibody; CDK4 Antibody (C-term); Cyclin-dependent kinase 4; Cell division protein kinase 4; PSK-J3; anti-CDK4 antibody

PRODUCT SPECIFICATIONS

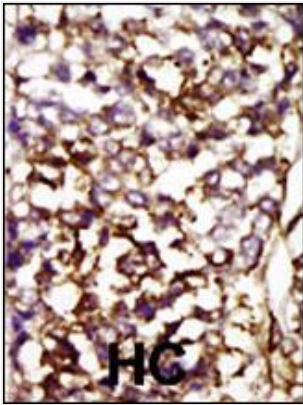
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This CDK4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 273-305 amino acids from the C-terminal region of human CDK4.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	273-305
Sequence Length	303
Applicable Applications for anti-CDK4 antibody	FCM/FACS (Flow Cytometry), ELISA, IHC (Immunohistochemistry), WB (Western Blot), IF (Immunofluorescence)
Application Notes	IF~~1:10~50 WB~~1:1000
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



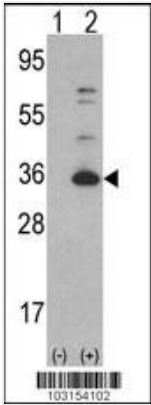
FCM (Flow Cytometry)
CDK4 Antibody (C-term) flow cytometric analysis of HL60 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



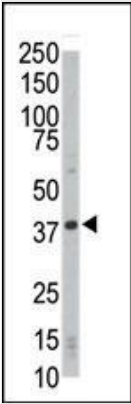
IHC (Immunohistochemistry)
Formalin-fixed and paraffin-embedded human prostate carcinoma with CDK4 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



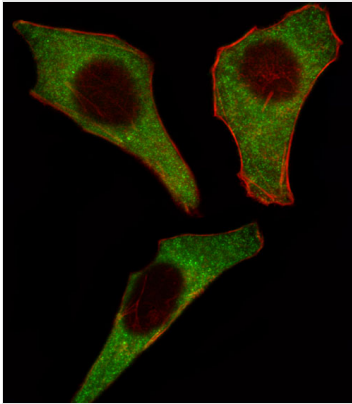
IHC (Immunohistochemistry)
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



WB (Western Blot)
Western blot analysis of CDK4 (arrow) using rabbit polyclonal CDK4 Antibody (C-term). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CDK4 gene (Lane 2) (Origene Technologies).



WB (Western Blot)
Western blot analysis of anti-CDK4 Pab in HL-60 cell lysate. CDK4 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



IF (Immunofluorescence)
Fluorescent image of HeLa cell stained with CDK4 Antibody (C-term). HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with CDK4 primary antibody (1:25, 1 h at 37 degree). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37 degree). Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37 degree). CDK4 immunoreactivity is localized to Cytoplasm significantly.

ADDITIONAL INFORMATION

Related Product Information for anti-CDK4 antibody	CDK4 is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of S. cerevisiae cdc28 and S. pombe cdc2. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in this gene as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of the gene have been reported.
Product Categories/Family for anti-CDK4 antibody	Cancer; Cell biology
References	Mori, N., et al., Int. J. Hematol. 77(3):259-262 (2003). Masaki, T., et al., Hepatology 37(3):534-543 (2003). Gump, J., et al., J. Biol. Chem. 278(9):6619-6622 (2003). Ramirez, R.D., et al., Oncogene 22(3):433-444 (2003). Detjen, K.M., et al., Exp. Cell Res. 282(2):78-89 (2003).

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; B2R9A0; B4DNF9
Molecular Weight	33730
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
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.