

Basic Information

Product Name	Anti-CDK4 Antibody	
Gene Name	CDK4	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of mouse Cdk4, different from the related rat sequence by one amino acid, and from the related human sequence by four amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	34 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200

Storage

12 months from date of receipt, -20°C as supplied.

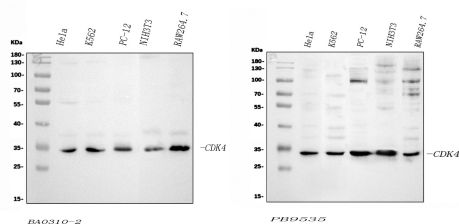
Background Information

Cyclin-dependent kinase-4(CDK4) is a protein-serine kinase involved in the cell cycle. Human cell division is regulated primarily at the G1-to-S or the G2-to-M boundaries within the cell cycle. The complexes formed by CDK4 and the D-type cyclins are involved in the control of cell proliferation during the G1 phase. CDK4 is inhibited by p16, also known as cyclin-dependent kinase inhibitor-2. CDK4 is mapped to 12q14. CDK4 expression and activity are required for cytokine responsiveness in T cells.

Reference

Anti-CDK4 Antibody 被引用在4文献中。

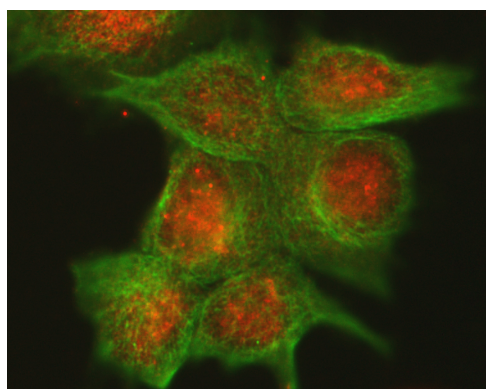
Selected Validation Data



Western blot analysis of anti-CDK4 antibody (BA0310-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

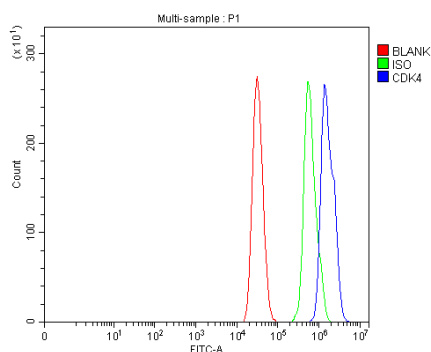
Lane 1: human HeLa whole cell lysates,
Lane 2: human K562 whole cell lysates,
Lane 3: rat PC-12 whole cell lysates,
Lane 4: mouse NIH/3T3 whole cell lysates,
Lane 5: mouse RAW 264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CDK4 antigen affinity purified polyclonal antibody (BA0310-2) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CDK4 at approximately 34 kDa. The expected band size for CDK4 is at 34 kDa.



ICC/IF analysis of CDK4 using anti-CDK4 antibody (BA0310-2) and anti-Tubulin alpha antibody (M03989-3).

CDK4 was detected in an immunocytochemical section of MCF-7 cells. Cy3-Conjugated Anti-rabbit IgG Secondary Antibody (Red) (Catalog # BA1032) and Fluoro488-conjugated Anti-mouse IgG Secondary Antibody (Green) (Catalog # BA1126) were used as secondary antibody.



Flow Cytometry analysis of MCF-7 cells using anti-CDK4 antibody (BA0310-2).

Overlay histogram showing MCF-7 cells stained with BA0310-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CDK4 Antibody (BA0310-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.