

Basic Information

Product Name	Anti-CDK1 Antibody (Clone#2G11)	
Gene Name	CDK1	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2b	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CDK1 recombinant protein (Position: L66-M297). Human CDK1 shares 97.8% and 98.3% amino acid (aa) sequence identity with mouse and rat CDK1, respectively.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	34 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

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

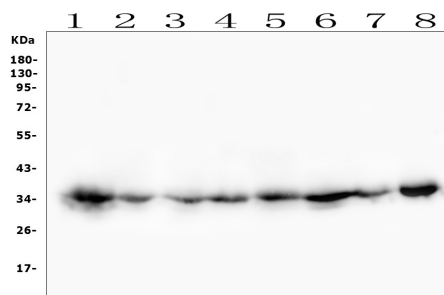
Background Information

The cyclin-dependent protein kinases(CDKs) regulate major cell cycle transitions in eukaryotic cells. CDKs contain an evolutionary conserved 16 amino acid sequence called PSTAIR(EGVPSTAIRESILLKE) which distinguishes them from other protein kinases. The PSTAIRE motif found in prototypic CDC2 kinases. CDC2L1 is referred as PITSLRE B, based on the amino acid sequence of the region corresponding to the conserved CDC2 PSTAIRE box.

Reference

Anti-CDK1 Antibody (Clone#2G11)被引用在4文献中。

Selected Validation Data



Western blot analysis of CDK1 using anti-CDK1 antibody (M00209-6). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HEK293 whole cell lysates,

Lane 2: human A549 whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human THP-1 whole cell lysates,

Lane 5: human PANC-1 whole cell lysates,

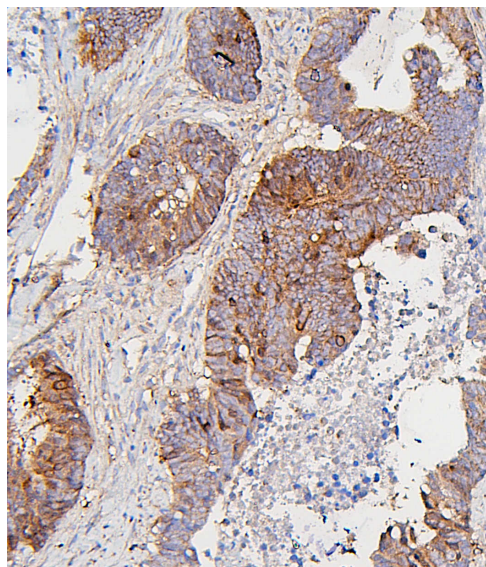
Lane 6: human SW620 whole cell lysates,

Lane 7: rat RH35 whole cell lysates,

Lane 8: mouse NIH/3T3 whole cell lysates.

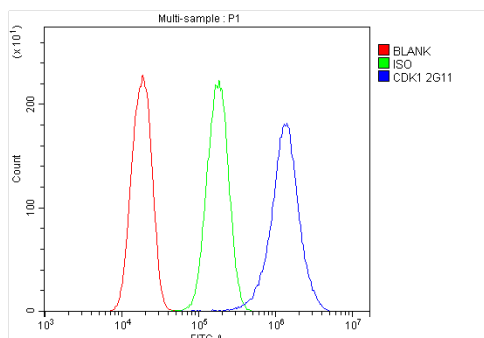
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with mouse anti-CDK1 antigen affinity purified monoclonal antibody (M00209-6) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CDK1 at approximately 34 kDa. The expected band size for CDK1 is at 34 kDa.



IHC analysis of CDK1 using anti-CDK1 antibody (M00209-6).

CDK1 was detected in a paraffin-embedded section of human colon cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-CDK1 Antibody (M00209-6) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of PC-3 cells using anti-CDK1 antibody (M00209-6).

Overlay histogram showing PC-3 cells stained with M00209-6 (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 mouse anti-CDK1 Antibody (M00209-6) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse 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.