

Basic Information

Product Name	Anti-Cyclin A/CCNA1 Antibody	
Gene Name	CCNA1	
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	E.coli-derived human Cyclin A1 recombinant protein (Position: D64-E263). Human Cyclin A1 shares 78.5% and 79.5% amino acid (aa) sequence identity with mouse and rat Cyclin A1, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	52 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

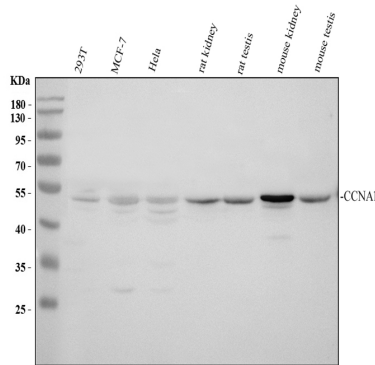
Cyclin-A1 is a protein that in humans is encoded by the CCNA1 gene. The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. The cyclin encoded by this gene was shown to be expressed in testis and brain, as well as in several leukemic cell lines, and is thought to primarily function in the control of the germline meiotic cell cycle. This cyclin binds both CDK2 and CDC2 kinases, which give two distinct kinase activities, one appearing in S phase, the other in G2, and thus regulate separate functions in cell cycle. Also this cyclin was found to bind to important cell cycle regulators, such as Rb family proteins, transcription factor

E2F-1, and the p21 family proteins. Multiple transcript variants encoding different isoforms have been found for this gene.

Reference

Anti-Cyclin A/CCNA1 Antibody 被引用在7文献中。

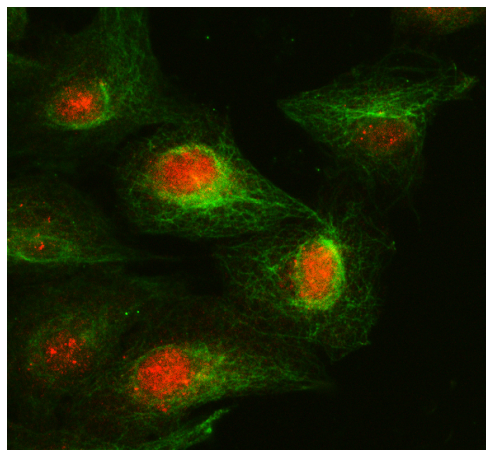
Selected Validation Data



Western blot analysis of Cyclin A/CCNA1 using anti-Cyclin A/CCNA1 antibody (PB0515). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

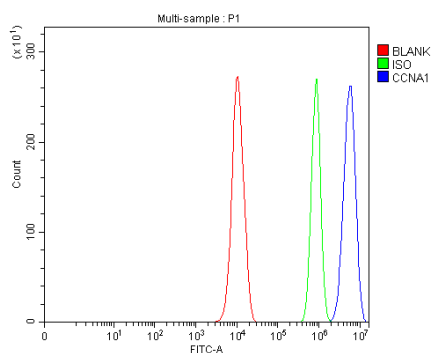
Lane 1: human 293T whole cell lysates,
Lane 2: human MCF-7 whole cell lysates,
Lane 3: human Hela whole cell lysates,
Lane 4: rat kidney tissue lysates,
Lane 5: rat testis tissue lysates,
Lane 6: mouse kidney tissue lysates,
Lane 7: mouse testis tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Cyclin A/CCNA1 antiA03957-Aen affinity purified polyclonal antibody (PB0515) at a dilution of 1:1000 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 Cyclin A/CCNA1 at approximately 52 kDa. The expected band size for Cyclin A/CCNA1 is at 52 kDa.



ICC/IF analysis of Cyclin A/CCNA1 using anti-Cyclin A/CCNA1 antibody (PB0515) and anti-Alpha Tubulin antibody (M03989-3).

Cyclin A/CCNA1 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-Cyclin A/CCNA1 Antibody (PB0515) at a dilution of 1:100. Cy3-Conjugated Anti-rabbit IgG Secondary Antibody (Red) (Catalog # BA1032) and FITC Conjugated AffiniPure Goat Anti-mouse IgG (H+L) Secondary Antibody (green) (Catalog # BA1101) were used as secondary antibody.



Flow Cytometry analysis of PC-3 cells using anti-Cyclin A/CCNA1 antibody (PB0515).

Overlay histogram showing PC-3 cells stained with PB0515 (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-Cyclin A/CCNA1 Antibody (PB0515) 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.