

Basic Information

Product Name	Anti-CDC7 Antibody	
Gene Name	CDC7	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CDC7 recombinant protein (Position: Q152-L574).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	64 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

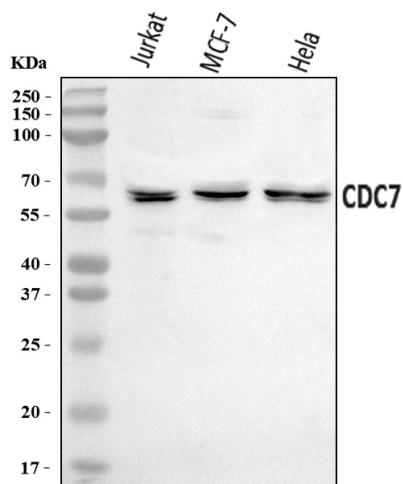
Storage

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

Background Information

Cell division cycle 7-related protein kinase is an enzyme that in humans is encoded by the CDC7 gene. This gene encodes a cell division cycle protein with kinase activity that is critical for the G1/S transition. The yeast homolog is also essential for initiation of DNA replication as cell division occurs. Overexpression of this gene product may be associated with neoplastic transformation for some tumors. Multiple alternatively spliced transcript variants that encode the same protein have been detected.

Selected Validation Data



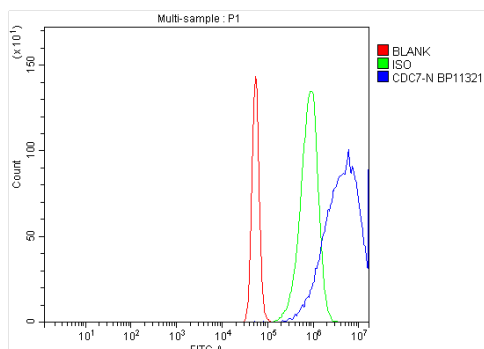
Western blot analysis of CDC7 using anti-CDC7 antibody (A01190-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Jurkat whole cell lysates,

Lane 2: MCF-7 whole cell lysates,

Lane 3: HeLa whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CDC7 antigen affinity purified polyclonal antibody (A01190-3) 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 CDC7 at approximately 64 kDa. The expected band size for CDC7 is at 64 kDa.



Flow Cytometry analysis of A431 cells using anti-CDC7 antibody (A01190-3).

Overlay histogram showing A431 cells stained with A01190-3 (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-CDC7 Antibody (A01190-3) at 1:100 dilution for 30 min at 20°C. DyLight®488 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.