

## Anti-Cdc25C Antibody Picoband®

Catalog Number: PB9756

### About CDC25C

M-phase inducer phosphatase 3 is an enzyme that in humans is encoded by the CDC25C gene. This gene is highly conserved during evolution and it plays a key role in the regulation of cell division. The encoded protein is a tyrosine phosphatase and belongs to the Cdc25 phosphatase family. It directs dephosphorylation of cyclin B-bound CDC2 (CDK1) and triggers entry into mitosis. Also, it is thought to suppress p53-induced growth arrest. Multiple alternatively spliced transcript variants of this gene have been described, however, the full-length nature of many of them is not known.

### Overview

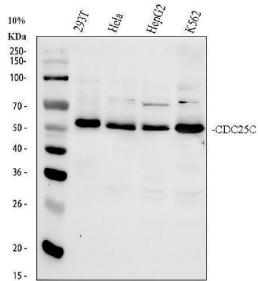
Product Name	Anti-Cdc25C Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Cdc25C Antibody Picoband® catalog # PB9756. Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P30307

### Technical Details

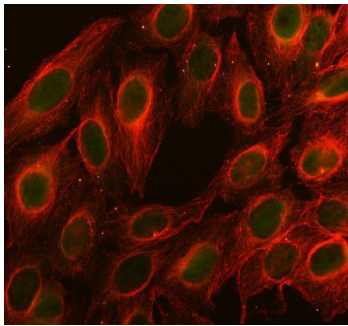
Immunogen	E.coli-derived human Cdc25C recombinant protein (Position: K175-P473). Human Cdc25C shares 78.2% amino acid (aa) sequence identity with mouse Cdc25C.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry(Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human

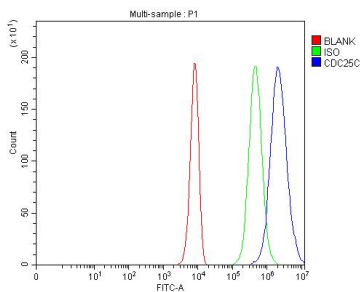
## Anti-Cdc25C Antibody Picoband® (PB9756) Images



Western blot analysis of Cdc25C using anti-Cdc25C antibody (PB9756). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. 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 HeLa whole cell lysates. Lane 3: human HepG2 whole cell lysates. Lane 4: human K562 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Cdc25C antigen affinity purified polyclonal antibody (PB9756) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for Cdc25C at approximately 53 kDa. The expected band size for Cdc25C is at 53 kDa.



IF analysis of Cdc25C using anti-Cdc25C antibody (PB9756) and anti-Tubulin Alpha antibody (M03989-3). Cdc25C was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-Cdc25C Antibody (PB9756) and mouse anti-Tubulin Alpha antibody (M03989-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) and Cy3 Conjugated Goat Anti-Mouse IgG (BA1031) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of K562 cells using anti-Cdc25C antibody (PB9756). Overlay histogram showing K562 cells stained with PB9756 (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-Cdc25C Antibody (PB9756, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

1. PubMed ID: 25176258, Ling H, Lu Lf, He J, Xiao Gh, Jiang H, Su Q. Oncol Rep. 2014 Nov;32(5):2274-82. Doi: 10.3892/Or.2014.3417. Epub 2014 Aug 19. Diallyl Disulfide Selectively Causes Checkpoint Kinase-1 Mediated G2/M Arrest In Human Mgc803 Gastric Cancer Cell Line.

2. PubMed ID: 29805667, Prostate cancer cell proliferation is suppressed by microRNA-3160-5p via targeting of F-box and WD repeat domain containing 8

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### Anti-Cdc25C Antibody

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