

Anti-Chk1/CHEK1 Antibody Picoband®

Catalog Number: A01060

About CHEK1

CHEK1, Cell cycle checkpoint kinase, is an enzyme that in humans is encoded by the CHEK1 gene. By fluorescence in situ hybridization, the human CHEK1 gene is mapped to 11q24, near the ATM gene at 11q23. CHEK1 is a kinase that phosphorylates cdc25, an important phosphatase in cell cycle control, particularly for entry into mitosis. Furthermore, CHEK1 acts to integrate signals from ATM and ATR, and is involved in monitoring meiotic recombination, a process that involves programmed DNA breaks.

Overview

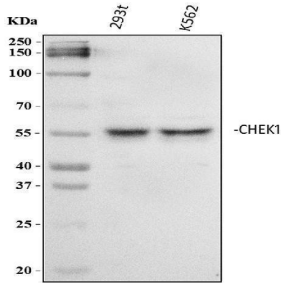
Product Name	Anti-Chk1/CHEK1 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Chk1/CHEK1 Antibody Picoband® catalog # A01060. Tested in Flow Cytometry, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior 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, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
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	O14757

Technical Details

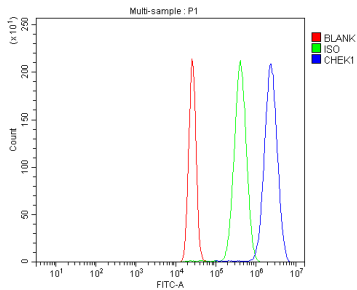
Immunogen	E.coli-derived human Chk1 recombinant protein (Position: M1-Q210). Human Chk1 shares 96.7% and 97.6% amino acid (aa) sequence identity with mouse and rat Chk1, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western 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 Flow Cytometry(Fixed), 1-3 ug/1x10 ⁶ cells, Human

Anti-Chk1/CHEK1 Antibody Picoband® (A01060) Images



Western blot analysis of Chk1/CHEK1 using anti-Chk1/CHEK1 antibody (A01060). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 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 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-Chk1/CHEK1 antigen affinity purified polyclonal antibody (Catalog # A01060) 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 at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Chk1/CHEK1 at approximately 54 kDa. The expected band size for Chk1/CHEK1 is at 54 kDa.



Flow Cytometry analysis of K562 cells using anti-Chk1/CHEK1 antibody (A01060). Overlay histogram showing K562 cells stained with A01060 (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-Chk1/CHEK1 Antibody (A01060, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Chk1/CHEK1 Antibody

For Research Use Only. Not for use in diagnostic procedures.