

## Anti-PLK1 Antibody Picoband®

Catalog Number: PB9500

### About PLK1

Serine/threonine-protein kinase PLK1, also known as polo-like kinase 1 (PLK-1) or serine/threonine-protein kinase 13 (STPK13), is an enzyme that in humans is encoded by the PLK1 (polo-like kinase 1) gene. Plk1 is an early trigger for G2/M transition. It supports the functional maturation of the centrosome in late G2/early prophase and establishment of the bipolar spindle. Also, Plk1 phosphorylates and activates cdc25C, a phosphatase that dephosphorylates and activates the cyclinB/cdc2 complex. Studies have shown that the loss of PLK1 expression can induce pro-apoptotic pathways and inhibit growth. Based on yeast and murine studies of meiosis, human PLK1 may also have a regulatory function in meiosis.

### Overview

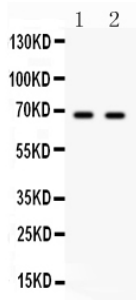
Product Name	Anti-PLK1 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-PLK1 Antibody Picoband® catalog # PB9500. Tested in WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , and 0.05 mg NaN <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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	P53350

### Technical Details

Immunogen	E.coli-derived human PLK1 recombinant protein (Position: K86-N430). Human PLK1 shares 95.4% and 96.2% amino acid (aa) sequence identity with mouse and rat PLK1, 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

## Anti-PLK1 Antibody Picoband® (PB9500) Images



Western blot analysis of PLK1 using anti-PLK1 antibody (PB9500). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: HELA Whole Cell Lysate at 40ug, Lane 2: PANC Whole Cell Lysate at 40ug. 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-PLK1 antigen affinity purified polyclonal antibody (Catalog # PB9500) 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 PLK1 at approximately 68 kDa. The expected band size for PLK1 is at 68 kDa.

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### Anti-PLK1 Antibody

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