

Anti-PER2 Antibody Picoband®

Catalog Number: PB9312

About PER2

The PER2 gene encodes the period circadian protein homolog 2 protein in humans. This gene is a member of the Period family of genes and is expressed in a circadian pattern in the suprachiasmatic nucleus, the primary circadian pacemaker in the mammalian brain. PER2 is mapped to 2q37.3. It has been showed that PER2 can positively stimulate activity of the Bmal1-Npas2 transcription complex and, in turn, Npas2 transcriptionally regulates delta-aminolevulinate synthase. PER2 is involved in a negative-feedback loop that attenuates estrogen stimulation and links the circadian cycle to estrogen receptor signaling. The rhythmic levels of PER2 are critical for circadian oscillations in cells and intact organisms. What's more, the PER2 gene also functions in tumor suppression by regulating DNA damage-responsive pathways.

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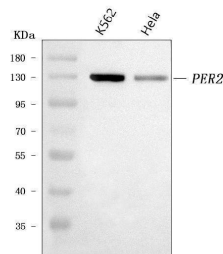
Overview

Product Name	Anti-PER2 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-PER2 Antibody Picoband® catalog # PB9312. 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 ₂ HPO ₄ , and 0.05 mg NaN ₃ . *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	O15055

Technical Details

Immunogen	E.coli-derived human PER2 recombinant protein (Position: N13-K330). Human PER2 shares 84% and 83% amino acid (aa) sequence identity with mouse and rat PER2, 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-PER2 Antibody Picoband® (PB9312) Images



Western blot analysis of PER2 using anti-PER2 antibody (PB9312). 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 K562 whole cell lysates, Lane 2: human HeLa 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-PER2 antigen affinity purified polyclonal antibody (Catalog # PB9312) 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 PER2 at approximately 130 kDa. The expected band size for PER2 is at 137 kDa.

Anti-PER2 Antibody

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