

Anti-CREB/CREB1 Antibody Picoband®

Catalog Number: PB9100

About CREB1

CREB1, also known as cAMP responsive element binding protein 1, is a protein that in humans is encoded by the CREB1 gene. It is mapped to 2q33.3. This protein binds the cAMP response element, a DNA nucleotide sequence present in many viral and cellular promoters. The binding of CREB1 stimulates transcription. This protein is a CREB transcription factor that is a member of the leucine zipper family of DNA-binding proteins. This protein binds as a homodimer to the cAMP-responsive element, an octameric palindrome. The protein is phosphorylated by several protein kinases, and induces transcription of genes in response to hormonal stimulation of the cAMP pathway.

Overview

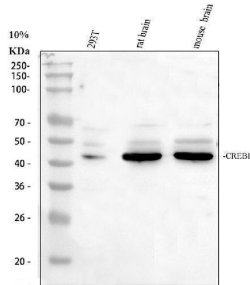
Product Name	Anti-CREB/CREB1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-CREB/CREB1 Antibody Picoband® catalog # PB9100. Tested in Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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, 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	P16220

Technical Details

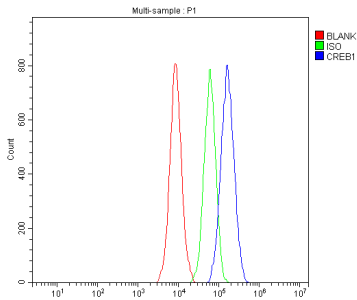
Immunogen	E.coli-derived human CREB recombinant protein (Position: M1-T177). Human CREB shares 99% and 98% amino acid (aa) sequences identity with mouse and rat CREB, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western 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, Mouse, Rat Flow Cytometry(Fixed), 1-3 ug/1x10 ⁶ cells, Human

Anti-CREB/CREB1 Antibody Picoband® (PB9100) Images



Western blot analysis of CREB1 using anti-CREB1 antibody (PB9100). 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: rat brain tissue lysates, Lane 3: mouse brain tissue 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-CREB1 antigen affinity purified polyclonal antibody (PB9100) 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 CREB1 at approximately 43 kDa. The expected band size for CREB1 is at 35 kDa.



Flow Cytometry analysis of 293T cells using anti-CREB1 antibody (PB9100). Overlay histogram showing 293T cells stained with PB9100 (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-CREB1 Antibody (PB9100, 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.

1 Publications Citing This Product

1. PubMed ID: 24289115, LncRNA DQ786243 affects Treg related CREB and Foxp3 expression in Crohn's disease

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