

Anti-B Raf/BRAF Antibody Picoband®

Catalog Number: PB9164

About BRAF

BRAF (v-raf murine sarcoma viral oncogene homolog B1) is a human gene that makes a protein called B-Raf. It is a member of the Raf kinase family of growth signal transduction protein kinases. This protein plays a role in regulating the MAP kinase/ERKs signaling pathway, which affects cell division, differentiation, and secretion. It is mapped to 7q34. Mutations in this gene are associated with cardiofaciocutaneous syndrome, a disease characterized by heart defects, mental retardation and a distinctive facial appearance. The BRAF protein is also involved in sending signals inside cells, which are involved in directing cell growth.

Overview

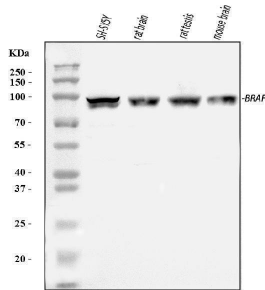
Product Name	Anti-B Raf/BRAF Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-B Raf/BRAF Antibody Picoband® catalog # PB9164. Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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, IHC, 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	P15056

Technical Details

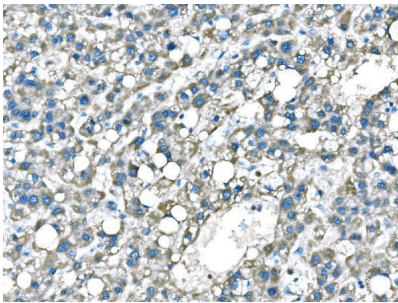
Immunogen	E.coli-derived human B Raf recombinant protein (Position: A38-V230). Human B Raf shares 81% amino acid (aa) sequence identity with mouse B Raf.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
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 Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human, Mouse, Rat Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human

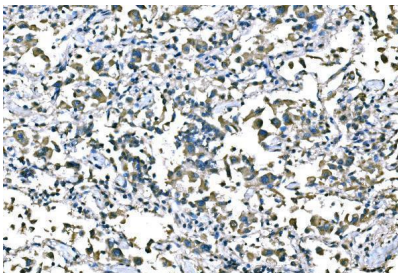
Anti-B Raf/BRAF Antibody Picoband® (PB9164) Images



Western blot analysis of B Raf/BRAF using anti-B Raf/BRAF antibody (PB9164). 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 SH-SY5Y whole cell lysates, Lane 2: rat brain tissue lysates, Lane 3: rat testis tissue lysates, Lane 4: 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-B Raf/BRAF antigen affinity purified polyclonal antibody (Catalog # PB9164) 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 B Raf/BRAF at approximately 84 kDa. The expected band size for B Raf/BRAF is at 84 kDa.

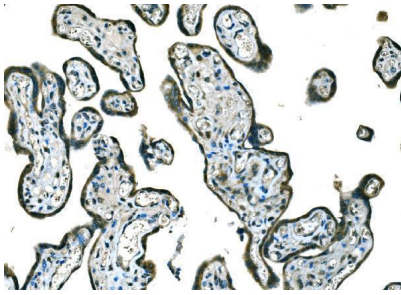


IHC analysis of B Raf/BRAF using anti-B Raf/BRAF antibody (PB9164). B Raf/BRAF was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-B Raf/BRAF Antibody (PB9164) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

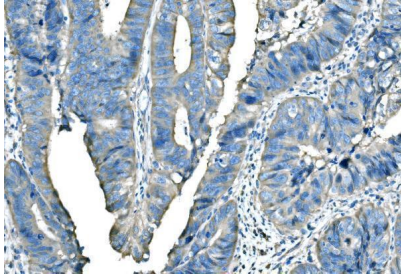


IHC analysis of B Raf/BRAF using anti-B Raf/BRAF antibody (PB9164). B Raf/BRAF was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-B Raf/BRAF Antibody (PB9164) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

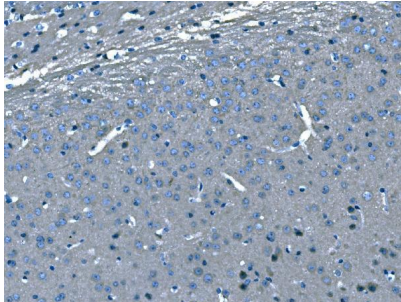
IHC analysis of B Raf/BRAF using anti-B Raf/BRAF antibody (PB9164). B Raf/BRAF was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope



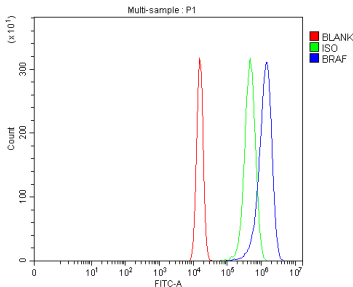
retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-B Raf/BRAF Antibody (PB9164) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of B Raf/BRAF using anti-B Raf/BRAF antibody (PB9164). B Raf/BRAF was detected in a paraffin-embedded section of human differentiated adenocarcinoma of the rectum tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-B Raf/BRAF Antibody (PB9164) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

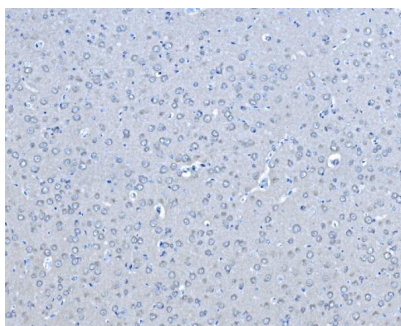


IHC analysis of B Raf/BRAF using anti-B Raf/BRAF antibody (PB9164). B Raf/BRAF was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-B Raf/BRAF Antibody (PB9164) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



Flow Cytometry analysis of U2OS cells using anti-B Raf/BRAF antibody (PB9164). Overlay histogram showing U2OS cells stained with PB9164 (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-B Raf/BRAF Antibody (PB9164, 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.

IHC analysis of B Raf/BRAF using anti-B Raf/BRAF antibody (PB9164). B Raf/BRAF was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval



was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-B Raf/BRAF Antibody (PB9164) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

1 Publications Citing This Product

1. PubMed ID: -, Feng,S.,Wang,S.,Sun,S.,Su,H.,& Zhang,L.(2021).Effects of combination treatment with transcranial magnetic stimulation and bone marrow mesenchymal stem cell transplantation or Raf inhibition on spinal cord injury in rats.Molecular Medicine Reports,23,294.h

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Anti-B Raf/BRAF Antibody

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