

Anti-GABA A Receptor alpha 1/GABRA1 Antibody Picoband®

Catalog Number: PA1578

About GABRA1

GABRA1, Gamma-aminobutyric acid receptor subunit alpha-1, is a protein that in humans is encoded by the GABRA1 gene. The 1,055-bp GABRA1 clone contained an open reading frame and 260 nucleotides in the 5-prime noncoding region. The 351-amino acid sequence shows 97% homology with its bovine counterpart. GABA is the major inhibitory neurotransmitter in the mammalian brain where it acts at GABA-A receptors, which are ligand-gated chloride channels. Chloride conductance of these channels can be modulated by agents such as benzodiazepines that bind to the GABA-A receptor. At least 16 distinct subunits of GABA-A receptors have been identified.

Overview

Product Name	Anti-GABA A Receptor alpha 1/GABRA1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-GABA A Receptor alpha 1/GABRA1 Antibody catalog # PA1578. Tested in 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	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg 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	P14867

Technical Details

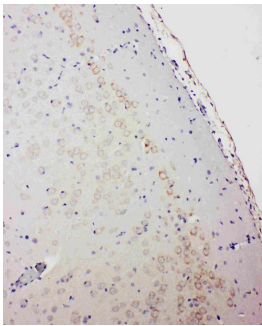
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human GABA A Receptor alpha 1, identical to the related rat and mouse sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated 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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Rat, Human, Mouse Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse

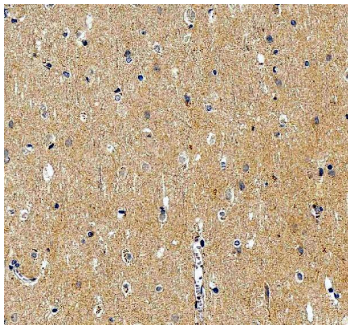
Anti-GABA A Receptor alpha 1/GABRA1 Antibody Picoband® (PA1578) Images



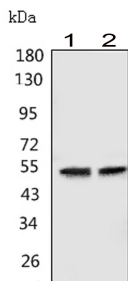
Anti-GABA A Receptor alpha 1 antibody, PA1578, Western blotting Lane 1: Rat Brain Tissue Lysate Lane 2: Rat Brain Tissue Lysate



Anti-GABA A Receptor alpha 1 antibody, PA1578, IHC(P)IHC(P): Rat Brain Tissue



IHC analysis of GABRA1 using anti-GABRA1 antibody (PA1578). GABRA1 was detected in a paraffin-embedded section of human 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-GABRA1 Antibody (PA1578) 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.



Western blot analysis of GABRA1 using anti-GABRA1 antibody (PA1578). 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 50ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human U-87MG whole cell lysates, After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-GABRA1 antigen affinity purified polyclonal antibody (Catalog # PA1578) 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 1:10000 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 GABRA1 at approximately 52KD. The expected band size for GABRA1 is at 52KD.

1 Publications Citing This Product

1. PubMed ID: 27895756, Role of microRNA-4458 in patients with non-small-cell lung cancer

Visit bosterbio.com/anti-gaba-a-receptor-alpha-1-antibody-pa1578-boster.html to see all 1 publications.

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