

Anti-Bestrophin/BEST1 Antibody Picoband™

Catalog Number: A01434-1

About BEST1

Bestrophin-1 (Best1) is a protein that, in humans, is encoded by the BEST1 gene. This gene encodes a member of the bestrophin gene family. This small gene family is characterized by proteins with a highly conserved N-terminus with four to six transmembrane domains. Bestrophins may form chloride ion channels or may regulate voltage-gated L-type calcium-ion channels. Bestrophins are generally believed to form calcium-activated chloride-ion channels in epithelial cells but they have also been shown to be highly permeable to bicarbonate ion transport in retinal tissue. Mutations in this gene are responsible for juvenile-onset vitelliform macular dystrophy (VMD2), also known as Best macular dystrophy, in addition to adult-onset vitelliform macular dystrophy (AVMD) and other retinopathies. Alternative splicing results in multiple variants encoding distinct isoforms.

Overview

Product Name	Anti-Bestrophin/BEST1 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Bestrophin/BEST1 Antibody Picoband™ catalog # A01434-1. Tested in Flow Cytometry, IHC, ICC, WB applications. This antibody reacts with Human.
Application	Flow Cytometry, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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	O76090

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Bestrophin, which shares 62.5% amino acid (aa) sequence identity with mouse Bestrophin.
Predicted Reactive Species	Human
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(F) and ICC.
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	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml</p> <p>Immunohistochemistry (Frozen Section), 0.5-1ug/ml</p> <p>Immunocytochemistry, 0.5-1ug/ml</p> <p>Flow Cytometry, 1-3ug/1x10⁶ cells</p>

Anti-Bestrophin/BEST1 Antibody Picoband™ (A01434-1) Images

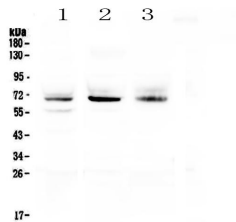


Figure 1. Western blot analysis of Bestrophin using anti-Bestrophin antibody (A01434-1).

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 A549 whole cell lysates,

Lane 2: human SGC-7901 whole cell lysates,

Lane 3: human U2OS 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-Bestrophin antigen affinity purified polyclonal antibody (Catalog # A01434-1) 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 Bestrophin at approximately 68KD. The expected band size for Bestrophin is at 68KD.

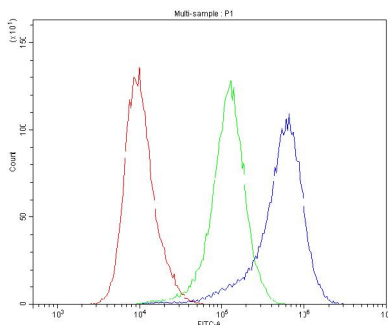


Figure 2. Flow Cytometry analysis of HeLa cells using anti-BEST1 antibody (A01434-1).

Overlay histogram showing HeLa cells stained with A01434-1 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-BEST1 Antibody (A01434-1,1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

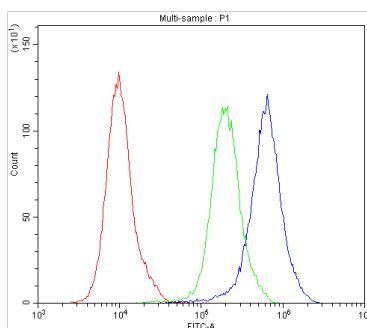


Figure 3. Flow Cytometry analysis of LOVO cells using anti-BEST1 antibody (A01434-1).

Overlay histogram showing LOVO cells stained with A01434-1 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-BEST1 Antibody (A01434-1,1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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