

Anti-Ankyrin erythroid/ANK/ANK1 Antibody Picoband® (monoclonal, 5H2E8)

Catalog Number: M02716-1

About ANK1

Ankyrin 1, erythrocytic, also known as ANK1, is a protein that in humans is encoded by the ANK1 gene. Ankyrins are a family of proteins that link the integral membrane proteins to the underlying spectrin-actin cytoskeleton and play key roles in activities such as cell motility, activation, proliferation, contact and the maintenance of specialized membrane domains. Multiple isoforms of ankyrin with different affinities for various target proteins are expressed in a tissue-specific, developmentally regulated manner. Most ankyrins are typically composed of three structural domains: an amino-terminal domain containing multiple ankyrin repeats; a central region with a highly conserved spectrin binding domain; and a carboxy-terminal regulatory domain which is the least conserved and subject to variation. Ankyrin 1, the prototype of this family, was first discovered in the erythrocytes, but since has also been found in brain and muscles. Mutations in erythrocytic ankyrin 1 have been associated in approximately half of all patients with hereditary spherocytosis. Complex patterns of alternative splicing in the regulatory domain, giving rise to different isoforms of ankyrin 1 have been described. Truncated muscle-specific isoforms of ankyrin 1 resulting from usage of an alternate promoter have also been identified.

Overview

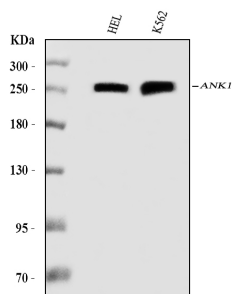
Product Name	Anti-Ankyrin erythroid/ANK/ANK1 Antibody Picoband® (monoclonal, 5H2E8)
Reactive Species	Human
Description	Boster Bio Anti-Ankyrin erythroid/ANK/ANK1 Antibody Picoband® (monoclonal, 5H2E8) catalog # M02716-1. Tested in Flow Cytometry, WB applications. This antibody reacts with Human. The 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	Flow Cytometry, WB
Clonality	Monoclonal 5H2E8
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	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 freezing and thawing.
Host	Mouse
Uniprot ID	P16157

Technical Details

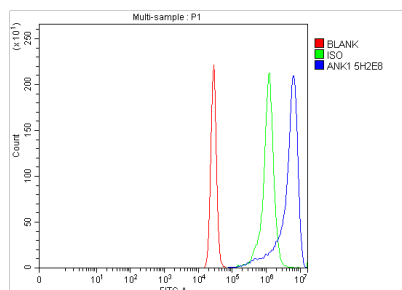
Immunogen	E.coli-derived human Ankyrin erythroid/ANK/ANK1 recombinant protein (Position: N1300-Q1844).
-----------	--

Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG2a
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, 0.25-0.5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human

Anti-Ankyrin erythroid/ANK/ANK1 Antibody Picoband® (monoclonal, 5H2E8) (M02716-1) Images



Western blot analysis of Ankyrin erythroid/ANK/ANK1 using anti-Ankyrin erythroid/ANK/ANK1 antibody (M02716-1). 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 30 ug of sample under reducing conditions. Lane 1: human HEL whole cell lysates, Lane 2: human K562 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 mouse anti-Ankyrin erythroid/ANK/ANK1 antigen affinity purified monoclonal antibody (Catalog # M02716-1) 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-mouse 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 # EK1001) with Tanon 5200 system. A specific band was detected for Ankyrin erythroid/ANK/ANK1 at approximately 206 kDa. The expected band size for Ankyrin erythroid/ANK/ANK1 is at 206 kDa.



Flow Cytometry analysis of K562 cells using anti-Ankyrin erythroid/ANK/ANK1 antibody (M02716-1). Overlay histogram showing K562 cells stained with M02716-1 (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 mouse anti-Ankyrin erythroid/ANK/ANK1 Antibody (M02716-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse 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.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Ankyrin erythroid/ANK/ANK1 Antibody (monoclonal, 5H2E8)

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