

Anti-CD127/IL7R Antibody Picoband®

Catalog Number: A02222-3

About IL7R

The interleukin-7 receptor, also known as IL7R alpha, is a protein found on the surface of cells. It is mapped to 5p13. Interleukin-7 receptor has been shown to play a critical role in the development of immune cells called lymphocytes - specifically in a process known as V(D)J recombination. This protein is also found to control the accessibility of a region of the genome that contains the T-cell receptor gamma gene, by STAT5 and histone acetylation. Knockout studies in mice suggest that blocking apoptosis is an essential function of this protein during differentiation and activation of T lymphocytes. Functional defects in this protein may be associated with the pathogenesis of severe combined immunodeficiency (SCID).

Overview

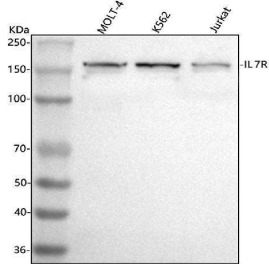
Product Name	Anti-CD127/IL7R Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-CD127/IL7R Antibody Picoband® catalog # A02222-3. Tested in ELISA, IHC, WB, Flow Cytometry applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees 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	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 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	Rabbit
Uniprot ID	P16871

Technical Details

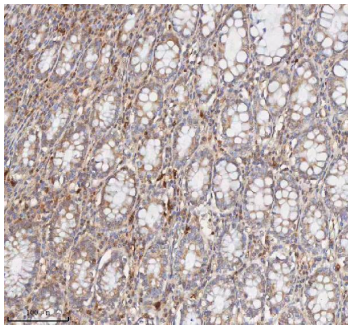
Immunogen	E.coli-derived human CD127/IL7R recombinant protein (Position: A33-Q433). Human IL7R shares 63.1% amino acid (aa) sequence identity with mouse IL7R.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human Immunohistochemistry(Paraffin-embedded Section), 1-2 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human ELISA, 0.1-0.5 ug/ml, -

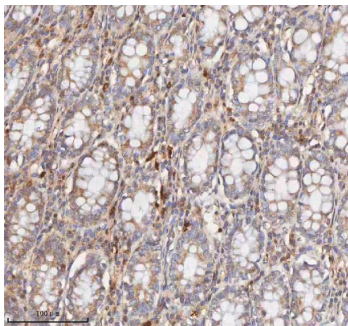
Anti-CD127/IL7R Antibody Picoband® (A02222-3) Images



Western blot analysis of CD127/IL7R using anti-CD127/IL7R antibody (A02222-3). 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 MOLT-4 whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human Jurkat 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 rabbit anti-CD127/IL7R antigen affinity purified polyclonal antibody (Catalog # A02222-3) 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 CD127/IL7R at approximately 170 kDa. The expected band size for CD127/IL7R is at 52 kDa.

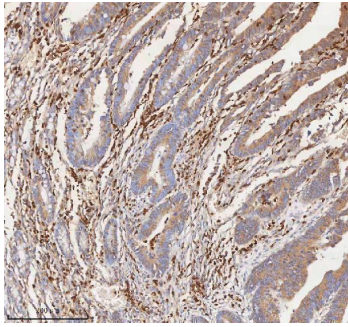


IHC analysis of CD127/IL7R using anti-CD127/IL7R antibody (A02222-3). CD127/IL7R was detected in a paraffin-embedded section of human colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD127/IL7R Antibody (A02222-3) 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.

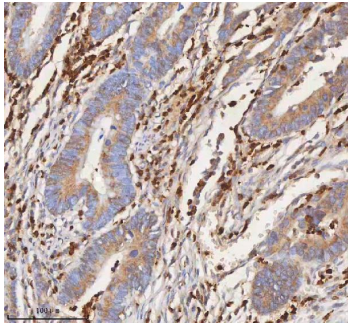


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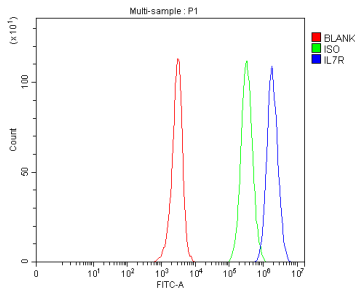
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Flow Cytometry analysis of JK cells using anti-CD127/IL7R antibody (A02222-3). Overlay histogram showing JK cells stained with A02222-3 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CD127/IL7R Antibody (A02222-3, 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 (Red line) was also used as a control.

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Anti-CD127/IL7R Antibody

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