

Anti-IL2RA Antibody Picoband®

Catalog Number: PA1747

About IL2RA

IL2RA (Interleukin 2 receptor, alpha), also called IL2R, IL2R, Alpha Chain or CD25, is a protein that in humans is encoded by the IL2RA gene. The IL2RA gene is mapped on 10p15.1. IL2RA is composed of strand-swapped "sushi-like" domains, unlike the classical cytokine receptor fold. As a result of this domain swap, IL2RA uses a composite surface to dock into a groove on IL2 that also serves as a binding site for antagonist drugs. Homodimeric alpha chains (IL2RA) result in low-affinity receptor, while homodimeric beta (IL2RB) chains produce a medium-affinity receptor. Normally an integral-membrane protein, soluble IL2RA has been isolated and determined to result from extracellular proteolysis. Infection by the protozoan *Trypanosoma cruzi* causes Chagas disease, characterized by a reduction in the amount of IL2RA expressed on the surface of immune cells. This leads to chronic immune suppression, becoming increasingly severe over the course of many years and ultimately resulting in death if left untreated.

Overview

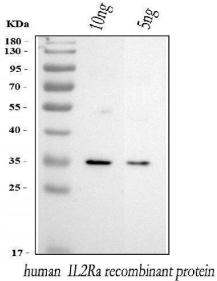
Product Name	Anti-IL2RA Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-IL2RA Antibody catalog # PA1747. Tested in IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg 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	P01589

Technical Details

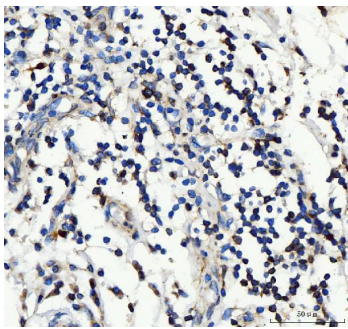
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human CD25/IL-2sR Alpha.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for 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 Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human

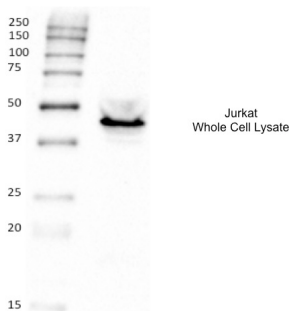
Anti-IL2RA Antibody Picoband® (PA1747) Images



Western blot analysis of IL2RA using anti-IL2RA antibody (PA1747). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: recombinant human CD25/IL2RA protein 10ng, Lane 2: recombinant human CD25/IL2RA protein 5ng. 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-IL2RA antigen affinity purified polyclonal antibody (Catalog # PA1747) 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.



IHC analysis of IL2RA using anti-IL2RA antibody (PA1747). IL2RA was detected in a paraffin-embedded section of human lymph 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-IL2RA Antibody (PA1747) 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 IL2RA using anti-IL2RA antibody (PA1747). 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 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% milk for 2 hour at RT. The membrane was incubated with anti-IL2RA antibody (PA1747) at 1:1000 for 16 hours at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a mouse anti-rabbit secondary antibody at a dilution of 1:10,000 for 2 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 IL2RA at approximately 45 kDa. The expected band size for IL2RA is at 31 kDa.

1 Publications Citing This Product

1. PubMed ID: 10.4049/jimmunol.1701151, Expression of a Functional IL-2 Receptor in Vascular Smooth Muscle Cells

Visit bosterbio.com/anti-cd25-il-2sr-alpha-antibody-pa1747-boster.html to see all 1 publications.

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Anti-IL2RA Antibody

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