

Anti-CD22 Antibody Picoband®

Catalog Number: PB9691

About CD22

CD22 is a surface glycoprotein of B lymphocytes that is rapidly phosphorylated on cytoplasmic tyrosines after antigen receptor cross-linking. It is a negative regulator of antigen receptor signaling whose onset of expression at the mature B cell stage may serve to raise the antigen concentration threshold required for B cell triggering. The human CD22 gene is expressed specifically in B lymphocytes and likely has an important function in cell-cell interactions. The B cell coreceptor CD22 plays an important role in regulating signal transduction via the B cell Ag receptor. And CD22 is located within the band region q13.1 of chromosome 19.

Overview

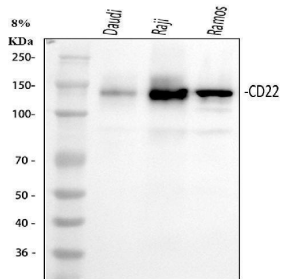
Product Name	Anti-CD22 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-CD22 Antibody Picoband® catalog # PB9691. Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that 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	Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , and 0.05 mg 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	P20273

Technical Details

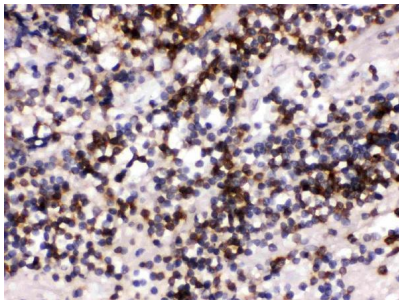
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human CD22, different from the related mouse sequence by ten amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit 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, Human Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Flow Cytometry, 1-3ug/1x10 ⁶ cells, Human

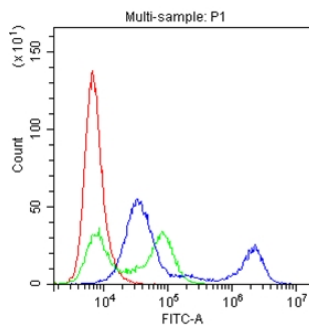
Anti-CD22 Antibody Picoband® (PB9691) Images



Western blot analysis of CD22 using anti-CD22 antibody (PB9691). 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 Daudi whole cell lysates, Lane 2: human Raji whole cell lysates, Lane 3: human Ramos 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-CD22 antigen affinity purified polyclonal antibody (Catalog # PB9691) 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 CD22 at approximately 140kDa. The expected band size for CD22 is at 95 kDa.



IHC analysis of CD22 using anti-CD22 antibody (PB9691). CD22 was detected in a paraffin-embedded section of human tonsil 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 1 ug/ml rabbit anti-CD22 Antibody (PB9691) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



Flow Cytometry analysis of Raji cells using anti-CD22 antibody (PB9691). Overlay histogram showing Raji cells stained with PB9691 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD22 Antibody (PB9691, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight488 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.

2 Publications Citing This Product

1. PubMed ID: 23346371, Huang J, Zhu C, Zhang P, Zhu Q, Liu Y, Zhu Z, Wang M, Li W, Yang G, Dong N, Liu J, Chen L, Zhang Y, Yang R, Deng L, Fan J, Wang X, Liu J, Ma B, Fu Q, Wu K. Sci Rep. 2013;3:1114. Doi: 10.1038/Srep01114. Epub 2013 Jan 23. S100+ Cells: A New Neuro-Im...
2. PubMed ID: 21225479, Yu X, Li L, Li Q, Zang X, Liu Z. Biol Trace Elem Res. 2011 Nov;143(2):1064-76. Doi: 10.1007/S12011-010-8941-5. Epub 2011 Jan 12. Trail And Dr5 Promote Thyroid Follicular Cell Apoptosis In Iodine Excess-Induced Experimental Autoimmune Thyroiditis I...

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