

Anti-CD79b Antibody Picoband™ (monoclonal, 6H11)

Catalog # ABO14914

Product Information

Application	WB, IHC
Primary Accession	P40259
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Rat, Human
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-CD79b Antibody Picoband™ (monoclonal, 6H11) . Tested in IHC, WB applications. This antibody reacts with Human, Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500 µg/ml.

Additional Information

Gene ID	974
Other Names	B-cell antigen receptor complex-associated protein beta chain, B-cell-specific glycoprotein B29, Ig-beta, Immunoglobulin-associated B29 protein, CD79b, CD79B, B29, IGB
Calculated MW	26048
Application Details	Western blot, 0.1-0.5 µg/ml, Human Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat
Source	Eukaryota
Protein Name	CD79b molecule
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Clone Names	Clone: 6H11
Immunogen	E.coli-derived human CD79b recombinant protein (Position: A29-E229). Human CD79b shares 70% amino acid (aa) sequence identity with mouse CD79b.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross-reactivity with other proteins.
Storage	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.

Protein Information

Name	CD79B
Synonyms	B29, IGB
Function	Required in cooperation with CD79A for initiation of the signal transduction cascade activated by the B-cell antigen receptor complex (BCR) which leads to internalization of the complex, trafficking to late endosomes and antigen presentation. Enhances phosphorylation of CD79A, possibly by recruiting kinases which phosphorylate CD79A or by recruiting proteins which bind to CD79A and protect it from dephosphorylation.
Cellular Location	Cell membrane; Single-pass type I membrane protein. Note=Following antigen binding, the BCR has been shown to translocate from detergent-soluble regions of the cell membrane to lipid rafts although signal transduction through the complex can also occur outside lipid rafts.
Tissue Location	B-cells.

Background

CD79b molecule, immunoglobulin-associated beta, also known as CD79B (Cluster of Differentiation 79B), is a human gene. By fluorescence in situ hybridization, It is mapped to 17q23.3. The CD79B protein together with the related CD79A protein, forms a dimer associated with membrane bound immunoglobulin in B-cells, thus forming the B-cell antigen receptor (BCR) which is a multimeric complex that includes the antigen-specific component, surface immunoglobulin (Ig). CD79b also can enhances phosphorylation of CD79A, possibly by recruiting kinases which phosphorylate CD79A or by recruiting proteins which bind to CD79A and protect it from dephosphorylation.

Images

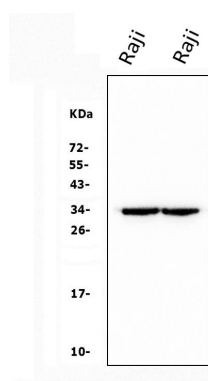


Figure 1. Western blot analysis of CD79b using anti-CD79b antibody (M01399-1).

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 Raji whole cell lysates;

Lane 2: human Raji 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 mouse anti-CD79b antigen affinity purified monoclonal antibody (Catalog # M01399-1) at 0.5 µg/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 CD79b at approximately 35KD. The expected band size for CD79b is at 26KD.

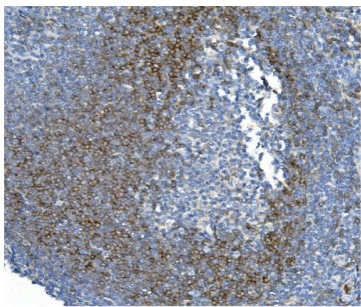


Figure 2. IHC analysis of CD79b using anti-CD79b antibody (M01399-1). CD79b was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml mouse anti-CD79b Antibody (M01399-1) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.

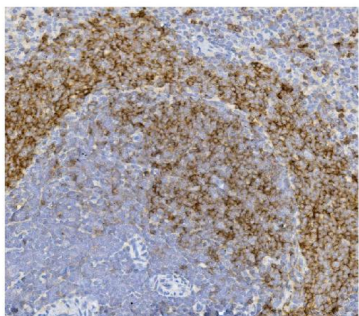


Figure 3. IHC analysis of CD79b using anti-CD79b antibody (M01399-1). CD79b was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml mouse anti-CD79b Antibody (M01399-1) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.