abcam

Product datasheet

Anti-CD79a antibody [JCB117 + HM47A9] ab199001

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Overview

Product name Anti-CD79a antibody [JCB117 + HM47A9]

Description Mouse monoclonal [JCB117 + HM47A9] to CD79a

Host species Mouse

Specificity ab199001 is generally used to complement anti-CD20 especially for mature B-cell lymphomas

after treatment with anti-CD20. ab199001 will stain many of the same lymphomas as anti-CD20, but also is more likely to stain B-lymphoblastic lymphoma/leukemia than is anti-CD20. Anti-CD79a also stains more cases of plasma cell myeloma and occasionally some types of

endothelial cells as well.

Tested applications

Suitable for: IHC-P

Species reactivity

Reacts with: Human

Immunogen Synthetic peptide corresponding to Human CD79a. Clone HM47A9 immunogen is a synthetic

peptide corresponding to aa 202-216 of human CD79a protein. Clone JCB117 immunogen is a

soluble form of the extracellular IgSF domain of human CD79a.

Database link: P11912

Positive control Daudi or Ramos cells. Germinal center B-cells in a lymph node or tonsil.

General notes Both antibodies (JCB117 + HM47/A9) are mouse IgG1 kappa.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Please note that this antibody is an oligoclonal antibody. It is a cocktail of monoclonal antibodies that have been carefully selected. Oligoclonal antibodies have not only the specificity and batch-to-batch consistency of a monoclonal antibody, but also have the advantage of the sensitivity of a

polyclonal antibody due to their ability to recognize multiple epitopes on an antigen.

Properties

Form Liquid

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Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.05% Sodium azide Constituents: 99% PBS, 0.05% BSA

Purity Protein G purified

Clonality Monoclonal

Clone number JCB117 + HM47A9

lsotype lgG1 **Light chain type** kappa

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab199001 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (2)	Use a concentration of 0.5 - 1 μ g/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function Required in cooperation with CD79B for initiation of the signal transduction cascade activated by

binding of antigen to the B-cell antigen receptor complex (BCR) which leads to internalization of the complex, trafficking to late endosomes and antigen presentation. Also required for BCR surface expression and for efficient differentiation of pro- and pre-B-cells. Stimulates SYK autophosphorylation and activation. Binds to BLNK, bringing BLNK into proximity with SYK and allowing SYK to phosphorylate BLNK. Also interacts with and increases activity of some Srcfamily tyrosine kinases. Represses BCR signaling during development of immature B cells.

Tissue specificity B-cells.

Involvement in disease Defects in CD79A are the cause of agammaglobulinemia type 3 (AGM3) [MIM:613501]. It is a

primary immunodeficiency characterized by profoundly low or absent serum antibodies and low or absent circulating B cells due to an early block of B-cell development. Affected individuals develop severe infections in the first years of life. Note=Two different mutations, one at the splice

donor site of intron 2 and the other at the splice acceptor site for exon 3, have been identified.

Both mutations give rise to a truncated protein.

Sequence similarities Contains 1 lg-like C2-type (immunoglobulin-like) domain.

Contains 1 ITAM domain.

Post-translational Phosphorylated on tyrosine, serine and threonine residues upon B-cell activation. Phosphorylation of tyrosine residues by Src-family kinases is an early and essential feature of the BCR signaling

of tyrosine residues by Src-family kinases is an early and essential feature of the BCR signaling cascade. The phosphorylated tyrosines serve as docking sites for SH2-domain containing kinases, leading to their activation which in turn leads to phosphorylation of downstream targets.

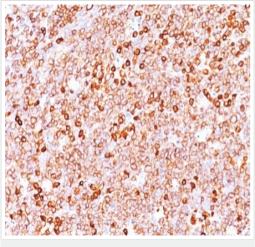
Phosphorylation of serine and threonine residues may prevent subsequent tyrosine

phosphorylation.

Cellular localization

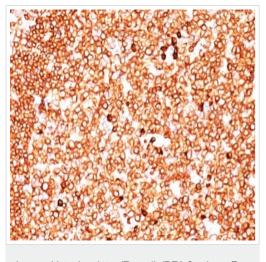
Cell membrane. Following antigen binding, the BCR has been shown to translocate from detergent-soluble regions of the cell membrane to lipid rafts although signal transduction through the complex can also occur outside lipid rafts.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD79a antibody [JCB117 + HM47A9] (ab199001)

Immunohistochemical analysis of Formalin-fixed, paraffinembedded Human tonsil tissue labeling CD79a with ab199001 at $1\mu g/mL$.



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Immunohistochemical analysis of Formalin-fixed, paraffinembedded Human tonsil tissue labeling CD79a with ab199001 at $1\mu g/mL$.

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