

## Product datasheet

# PerCP/Cy5.5® Anti-CD79α antibody [HM47], prediluted ab155344

[1 References](#) [1 Image](#)

### Overview

<b>Product name</b>	PerCP/Cy5.5® Anti-CD79a antibody [HM47], prediluted
<b>Description</b>	PerCP/Cy5.5® Mouse monoclonal [HM47] to CD79a, prediluted
<b>Host species</b>	Mouse
<b>Conjugation</b>	PerCP/Cy5.5®. Ex: 482nm, Em: 690nm
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment corresponding to CD79a.
<b>Positive control</b>	Normal Human peripheral blood cells.
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C.
<b>Storage buffer</b>	<p>pH: 7.20</p> <p>Preservative: 0.09% Sodium azide</p> <p>Constituents: 99% PBS, 0.2% BSA</p>
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	HM47
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab155344 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
Flow Cyt		Use 5µl for 10 <sup>6</sup> cells. <b>ab157226</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## 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 Src-family 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 Ig-like C2-type (immunoglobulin-like) domain.  
Contains 1 ITAM domain.

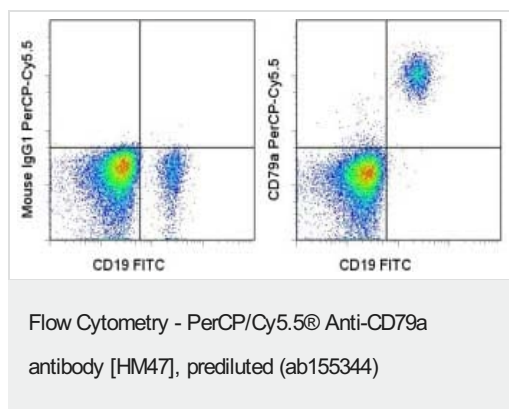
### Post-translational modifications

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 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



Flow cytometric analysis of normal Human peripheral blood cells with Anti-Human CD19 FITC followed by intracellular staining with Mouse IgG1 K Isotype Control PerCP-Cy5.5 (left) or ab155344 (right) using IC Fixation and Permeabilization Buffers. Cells in the lymphocyte gate were used for analysis.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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