Datasheet for ABIN301989

anti-CD79a antibody (AA 202-216) (APC)

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Overview

Quantity:	100 tests
Target:	CD79a (CD79A)
Binding Specificity:	AA 202-216
Reactivity:	Human, Mouse, Rat, Cow, Pig, Chicken, Guinea Pig, Horse, Rabbit, Opossum
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD79a antibody is conjugated to APC
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Synthetic peptide corresponding to amino acids 202-216 of human CD79a
Clone:	HM57
Isotype:	IgG1
Specificity:	The antibody HM57 interacts with intracellular domain of CD79a (Ig alpha), a 40-45 kDa subunit of B cell antigen-specific receptor (BCR) and its early developmental forms.
Cross-Reactivity (Details):	Human, Porcine, Mouse, Rat, Bovine, Equine (Horse), Guinea pig, Opossum, Rabbit, Chicken, Other not determined
Purification:	Purified antibody is conjugated with activated allophycocyanin (APC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	CD79a (CD79A)
Alternative Name:	CD79a (CD79A Products)
Background:	CD79a molecule,CD79a (Ig alpha, MB1) forms disulfide-linked heterodimer with CD79b (Ig beta). They both are transmembrane proteins with extended cytoplasmic domains containing immunoreceptor tyrosine activation motives (ITAMs), and together with cell surface immunoglobulin they constitute B-cell antigen-specific receptor (BCR). CD79a and b are the first components of BCR that are expressed developmentally. They appear on pro-B cells in association with the endoplasmic reticulum chaperone calnexin. Subsequently, in pre-B cells, CD79 heterodimer is associated with lambda5-VpreB surrogate immunoglobulin and later with antigen-specific surface immunoglobulins. At the plasma cell stage, CD79a is present as an intracellular component. CD79a/b complex interacts with Src-family tyrosine kinase Lyn, which phosphorylates its cytoplasmic ITAM motives to form docking sites for downstream signaling.,BCR alpha, Ig-alpha, MB-1, IGA
Gene ID:	973
UniProt:	P11912
Pathways:	BCR Signaling

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µL reagent / 100 µL of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests. Intracellular staining.
Comment:	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

	should be handled by trained staff only.
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

Product cited in:

Faldyna, Samankova, Leva, Cerny, Oujezdska, Rehakova, Sinkora: "Cross-reactive anti-human monoclonal antibodies as a tool for B-cell identification in dogs and pigs." in: **Veterinary immunology and immunopathology**, Vol. 119, Issue 1-2, pp. 56-62, (2007) (PubMed).

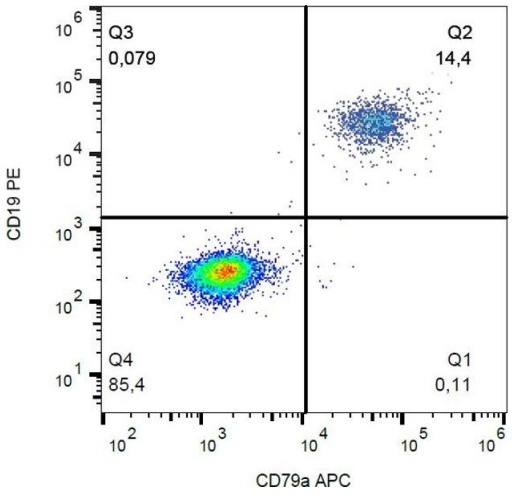
Mason, Cordell, Brown, Borst, Jones, Pulford, Jaffe, Ralfkiaer, Dallenbach, Stein: "CD79a: a novel marker for B-cell neoplasms in routinely processed tissue samples." in: **Blood**, Vol. 86, Issue 4, pp. 1453-9, (1995) (PubMed).

Jones, Cordell, Beyers, Tse, Mason: "Detection of T and B cells in many animal species using cross-reactive anti-peptide antibodies." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 150, Issue 12, pp. 5429-35, (1993) (PubMed).

Mason, van Noesel, Cordell, Comans-Bitter, Micklem, Tse, van Lier, van Dongen: "The B29 and mb-1 polypeptides are differentially expressed during human B cell differentiation." in: **European journal of immunology**, Vol. 22, Issue 10, pp. 2753-6, (1992) (PubMed).

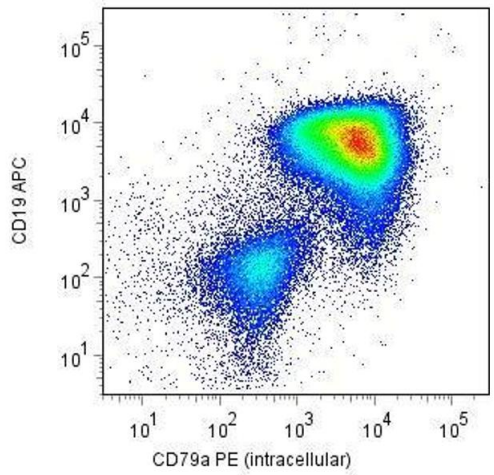
Mason, Cordell, Tse, van Dongen, van Noesel, Micklem, Pulford, Valensi, Comans-Bitter, Borst: " The IgM-associated protein mb-1 as a marker of normal and neoplastic B cells." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 147, Issue 11, pp. 2474-82, (1991) (PubMed).

There are more publications referencing this product on: Product page



Flow Cytometry

Image 1. Flow cytometry analysis (intracellular staining) of CD79a in human peripheral blood (lymphocyte gate) with anti-CD79a (HM57) APC.



Immunofluorescence

Image 2. Intracellular staining of CD79a with anti-CD79a (HM57) PE(gated on leukemic blast cells) in a patient with childhood B-precursor ALL.