Datasheet for ABIN2749135

anti-CD79a antibody (AA 208-222) (PE)

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Overview

Quantity:	100 tests
Target:	CD79a (CD79A)
Binding Specificity:	AA 208-222
Reactivity:	Human, Mouse, Rat, Cow, Pig, Chicken, Horse, Rabbit, Guinea Pig, Dog, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD79a antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Synthetic peptide corresponding to C terminal amino acids 208-222 of human CD79a
Clone:	HM47
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody HM47 reacts 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, Non-Human Primates, Porcine, Mouse, Rat, Bovine, Canine (Dog), Equine (Horse), Guinea pig, Rabbit, Chicken
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. 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 R-Phycoerythrin (PE) 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

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 should be handled by trained staff only.

Handling

Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

Product cited in:

Zhao, Hassan, Perry, Ning, Stass, Dehner: "C-MYC rearrangements are frequent in aggressive mature B-Cell lymphoma with atypical morphology." in: **International journal of clinical and experimental pathology**, Vol. 1, Issue 1, pp. 65-74, (2008) (PubMed).

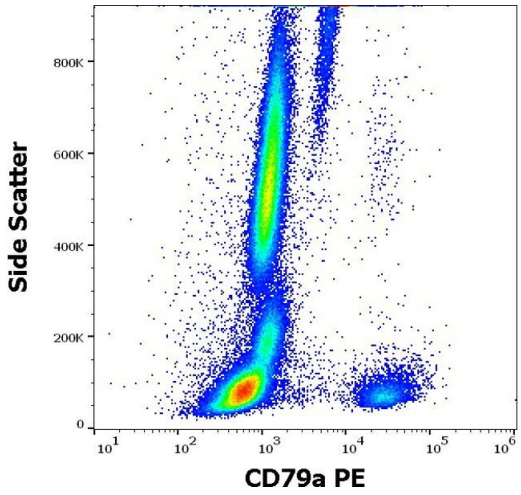
Bhargava, Kallakury, Ross, Azumi, Bagg: "CD79a is heterogeneously expressed in neoplastic and normal myeloid precursors and megakaryocytes in an antibody clone-dependent manner." in: **American journal of clinical pathology**, Vol. 128, Issue 2, pp. 306-13, (2007) (PubMed).

Fernandez, West, Jackson, Kidney: "Immunohistochemical and histochemical stains for differentiating canine cutaneous round cell tumors." in: **Veterinary pathology**, Vol. 42, Issue 4, pp. 437-45, (2005) (PubMed).

Islas-Ohlmayer, Padgett-Thomas, Domiati-Saad, Melkus, Cravens, Martin, Netto, Garcia: " Experimental infection of NOD/SCID mice reconstituted with human CD34+ cells with Epstein-Barr virus." in: **Journal of virology**, Vol. 78, Issue 24, pp. 13891-900, (2004) (PubMed).

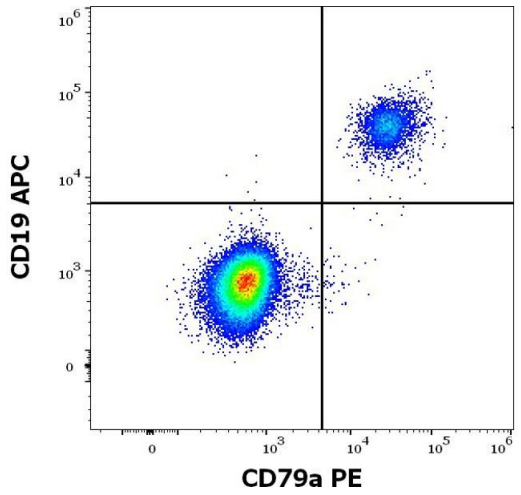
Torlakovic, Torlakovic: "B-cell markers in lymphocyte predominance Hodgkin disease." in: **Archives of pathology & laboratory medicine**, Vol. 126, Issue 7, pp. 862-3, (2002) (PubMed).

There are more publications referencing this product on: Product page



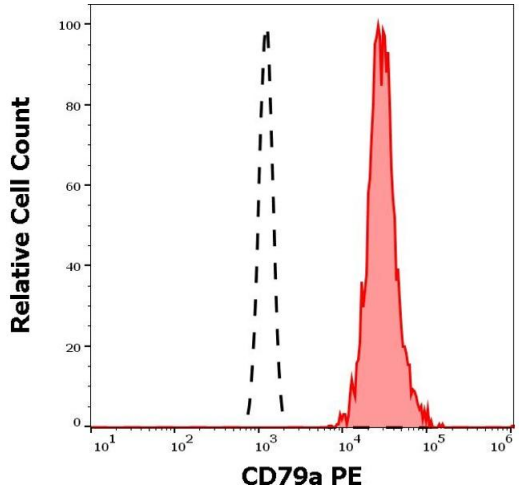
Flow Cytometry

Image 1. Flow cytometry intracellular staining pattern of human peripheral whole blood stained using anti-human CD79a (HM47) PE antibody (10 µL reagent / 100 µL of peripheral whole blood).



Flow Cytometry

Image 2. Flow cytometry multicolor surface staining of human lymphocytes using anti-human CD19 (LT19) APC antibody (10 µL reagent / 100 µL of peripheral whole blood) and intracellular staining of human lymphocytes using anti-human CD79a (HM47) PE antibody (10 µL reagent / 100 µL of peripheral whole blood).



Flow Cytometry

Image 3. Separation of human CD79a positive B cells (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (intracellular staining) of human peripheral whole blood stained using anti-human CD79a (HM47) PE antibody (10 µL reagent / 100 µL of peripheral whole blood).