

T9-731-T100

Monoclonal Antibody to CD79a PerCP-Cy™5.5 conjugated (100 tests)

Clone:	HM47
Isotype:	Mouse IgG1
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.
Regulatory Status:	RUO
Immunogen:	Synthetic peptide corresponding to C terminal amino acids 208-222 of human CD79a
Species Reactivity:	Human, Non-Human Primates, Porcine, Mouse, Rat, Bovine, Canine (Dog), Equine (Horse), Guinea pig, Rabbit, Chicken
Preparation:	The purified antibody is conjugated with tandem dye PerCP-Cy™5.5 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	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.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

- *Mason DY, Cordell JL, Tse AG, van Dongen JJ, van Noesel CJ, Micklem K, Pulford KA, Valensi F, Comans-Bitter WM, Borst J, et al.: The IgM-associated protein mb-1 as a marker of normal and neoplastic B cells. *J Immunol.* 1991 Dec 1;147(11):2474-82.
- *Bhargava P, Kallakury BV, Ross JS, Azumi N, Bagg A: CD79a is heterogeneously expressed in neoplastic and normal myeloid precursors and megakaryocytes in an antibody clone-dependent manner. *Am J Clin Pathol.* 2007 Aug;128(2):306-13.
- *Rassenti LZ, Kipps TJ: Expression of Ig-beta (CD79b) by chronic lymphocytic leukemia B cells that lack immunoglobulin heavy-chain allelic exclusion. *Blood.* 2000 Apr 15;95(8):2725-7.
- *Fernandez NJ, West KH, Jackson ML, Kidney BA: Immunohistochemical and histochemical stains for differentiating canine cutaneous round cell tumors. *Vet Pathol.* 2005 Jul;42(4):437-45.
- *Torlakovic E, Torlakovic G: B-cell markers in lymphocyte predominance Hodgkin disease. *Arch Pathol Lab Med.* 2002 Jul;126(7):862-3.
- *Zhao XF, Hassan A, Perry A, Ning Y, Stass SA, Dehner LP: C-MYC rearrangements are frequent in aggressive mature B-Cell lymphoma with atypical morphology. *Int J Clin Exp Pathol.* 2008 Jan 1;1(1):65-74.
- *Islas-Ohlmayer M, Padgett-Thomas A, Domiati-Saad R, Melkus MW, Cravens PD, Martin Mdel P, Netto G, Garcia JV: Experimental infection of NOD/SCID mice reconstituted with human CD34+ cells with Epstein-Barr virus. *J Virol.* 2004 Dec;78(24):13891-900.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

Cy™ and CyDye™ are registered trademarks of GE Healthcare.

For laboratory research only, not for drug, diagnostic or other use.

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz