EXBIO Antibodies

PRODUCT DATA SHEET

PB-579-C025

Monoclonal Antibody to CD8a (mouse) Pacific Blue™ conjugated (0.025 mg)

Clone:	53-6.7
Isotype:	Rat IgG2a
Specificity:	The rat monoclonal antibody 53-6.7 recognizes mouse CD8a (32-34 kDa; alpha chain of the CD8 antigen).
Regulatory Status:	RUO
Immunogen:	Mouse spleen cells
Species Reactivity:	Mouse
Preparation:	The purified antibody is conjugated with Pacific Blue™ under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Concentration:	0.5 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
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. Suggested working concentration is 8 µg/ml. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.
Expiration:	See vial label
Lot Number:	See vial label
Background:	The CD8a (CD8 alpha) subunit of CD8 T cell coreceptor is expressed in CD8 alpha/beta heterodimers on majority of MHC I-restricted conventional T cells and thymocytes and in CD8 alpha/alpha homodimers on subsets of memory T cells, intraepithelial lymphocytes, NK cells, macrophages and dendritic cells. Regulation of CD8 beta level on T cell surface seems to be an important mechanism to control their effector function. Assembly of CD8 alpha/beta but not alpha/alpha dimers is connected with formation or localization to the lipid rafts. Recruiting triggered TCR complexes to these membrane microdomains as well as affinity of TCR to MHC I is modulated by CD8, thereby affecting the functional diversity of the TCR signaling.

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

References:

*Ledbetter JA, Herzenberg LA: Xenogeneic monoclonal antibodies to mouse lymphoid differentiation antigens. Immunol Rev. 1979;47:63-90.
*Ledbetter JA, Rouse RV, Micklem HS, Herzenberg LA: T cell subsets defined by expression of Lyt-1,2,3 and Thy-1 antigens. Two-parameter immunofluorescence and cytotoxicity analysis with monoclonal antibodies modifies current views. J Exp Med. 1980 Aug 1;152(2):280-95.
*Takahashi K, Nakata M, Tanaka T, Adachi H, Nakauchi H, Yagita H, Okumura K: CD4 and CD8 regulate interleukin 2 responses of T cells. Proc Natl Acad Sci U S A. 1992 Jun 15;89(12):5557-61.
*Hata H, Sakaguchi N, Yoshitomi H, Iwakura Y, Sekikawa K, Azuma Y, Kanai C, Moriizumi E, Nomura T, Nakamura T, Sakaguchi S. Distinct contribution of IL-6, TNF-alpha, IL-1, and IL-10 to T cell-mediated spontaneous autoimmune arthritis in mice. J Clin Invest. 2004 Aug;114(4):582-8.
*Grabbe S, Varga G, Beissert S, Steinert M, Pendl G, Seeliger S, Bloch W, Peters T, Schwarz T, Sunderkötter C, Scharffetter-Kochanek K: Beta2 integrins are required for skin homing of primed T cells but not for priming naive T cells. J Clin Invest. 2002 Jan;109(2):183-92.
*Ko SY, Ko HJ, Chang WS, Park SH, Kweon MN, Kang CY: alpha-Galactosylceramide can act as a nasal vaccine adjuvant inducing protective immune responses against viral infection and tumor. J Immunol. 2005 Sep 1;175(5):3309-17.
*Kamimura D, Sawa Y, Sato M, Agung E, Hirano T, Murakami M: IL-2 in vivo activities and antitumor efficacy enhanced by an anti-IL-2 mAb. J Immunol. 2006 Jul 1;177(1):306-14.
*Bouwer HG, Alberti-Segui C, Montfort MJ, Berkowitz ND, Higgins DE: Directed antigen delivery as a vaccine strategy for an intracellular bacterial pathogen. Proc Natl Acad Sci U S A. 2006 Mar 28;103(13):5102-7.
*Mochimaru H, Usui T, Yaguchi T, Nagahama Y, Hasegawa G, Usui Y, Shimmura S, Tsubota K, Amano S, Kawakami Y, Ishida S: Suppression of alkali burn-induced corneal neovascularization by dendritic cell vaccination targeting VEGF receptor 2. Invest Ophthalmol Vis Sci. 2008 May;49(5):2172-7.
*And many other.

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.

This product is provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Exbio Praha, a.s., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity), including use in flow cytometry that does not utilize a bead based array, but excluding use in combination with microarrays or High Content Screening. The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components to provide a service, information, or data; (3) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.