

TECHNICAL DATA SHEET

CyFlow™ CD8a Alexa Fluor™ 488 Anti-Ms; Clone 53-6.7

REF AP888121

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD8a
Alternative Names	T8, Leu2
Clone	53-6.7
Clonality	monoclonal
Format	Alexa Fluor™ 488
Host / Isotype	Rat / IgG2a
Species Reactivity	Mouse
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [0.5 mg/ml]
Immunogen	Mouse spleen cells

Specificity

The rat monoclonal antibody 53-6.7 recognizes mouse CD8a antigen, a 32-34 kDa α chain of the CD8 antigen.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis. Suggested working usage is 0.5 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

The CD8a (CD8 α) subunit of CD8 T cell coreceptor is expressed in CD8 α/β heterodimers on majority of MHC I-restricted conventional T cells and thymocytes and in CD8 α/α 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 α/β but not α/α 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.

References

- Ledbetter JA, Herzenberg LA: Xenogeneic monoclonal antibodies to mouse lymphoid differentiation antigens. Immunol Rev. 1979; 47:63-90. < PMID: 398327 >
- 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. < PMID: 6156984 >
- 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 USA. 1992 Jun 15; 89(12):5557-61. < PMID: 1608966 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- 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. < PMID: 11805130 >
- 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. < PMID: 15314695 >
- 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. < PMID: 16116223 >
- 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 USA. 2006 Mar 28; 103(13):5102-7. < PMID: 16549792 >
- 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. < PMID: 16785526 >
- 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. < PMID: 18263815 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

This product is provided under an intellectual property license from Life Technologies Corporation. The transfer of this product is conditioned on the buyer using the purchased product solely in research conducted by the buyer, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com