



11-678-C100

Monoclonal Antibody to CD8a (rat) Purified Antibody (0.1 mg)

Clone:	OX-8
Isotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody OX-8 recognizes the hinge-like membrane-proximal domain of rat CD8a (32-34 kDa; alpha chain of the CD8 antigen).
Regulatory Status:	RUO
Immunogen:	High Mw glycoproteins from rat thymocytes
Species Reactivity:	Rat
Application:	Flow Cytometry Immunoprecipitation Western Blotting Immunohistochemistry (paraffin sections) Immunohistochemistry (frozen sections) Functional Application blocking
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-A affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
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.

**Antibodies****References:**

- *Barclay AN: The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. *Immunology*. 1981 Apr;42(4):593-600.
- *Torres-Nagel N, Kraus E, Brown MH, Tiefenthaler G, Mitnacht R, Williams AF, Hünig T: Differential thymus dependence of rat CD8 isoform expression. *Eur J Immunol*. 1992 Nov;22(11):2841-8.
- *Hirji N, Lin TJ, Befus AD: A novel CD8 molecule expressed by alveolar and peritoneal macrophages stimulates nitric oxide production. *J Immunol*. 1997 Feb 15;158(4):1833-40.
- *Mitnacht R, Bischof A, Torres-Nagel N, Hünig T: Opposite CD4/CD8 lineage decisions of CD4+8+ mouse and rat thymocytes to equivalent triggering signals: correlation with thymic expression of a truncated CD8 alpha chain in mice but not rats. *J Immunol*. 1998 Jan 15;160(2):700-7.
- *Ishida S, Usui T, Yamashiro K, Kaji Y, Amano S, Ogura Y, Hida T, Oguchi Y, Ambati J, Miller JW, Gragoudas ES, Ng YS, D'Amore PA, Shima DT, Adamis AP: VEGF164-mediated inflammation is required for pathological, but not physiological, ischemia-induced retinal neovascularization. *J Exp Med*. 2003 Aug 4;198(3):483-9.
- *Abe Y, Urakami H, Ostanin D, Zibari G, Hayashida T, Kitagawa Y, Grisham MB: Induction of Foxp3-expressing regulatory T-cells by donor blood transfusion is required for tolerance to rat liver allografts. *PLoS One*. 2009 Nov 23;4(11):e7840.
- *Katsumata Y, Harigai M, Sugiura T, Kawamoto M, Kawaguchi Y, Matsumoto Y, Kohyama K, Soejima M, Kamatani N, Hara M: Attenuation of experimental autoimmune myositis by blocking ICOS-ICOS ligand interaction. *J Immunol*. 2007 Sep 15;179(6):3772-9.
- *Pino SC, O'Sullivan-Murphy B, Lidstone EA, Yang C, Lipson KL, Jurczyk A, dilorio P, Brehm MA, Mordes JP, Greiner DL, Rossini AA, Bortell R: CHOP mediates endoplasmic reticulum stress-induced apoptosis in Gimap5-deficient T cells. *PLoS One*. 2009;4(5):e5468.

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.

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