

PE/Cyanine7 anti-rat CD8a

Catalog # / Size: 1608575 / 25 µg
1608580 / 100 µg

Clone: OX-8

Isotype: Mouse IgG1, κ

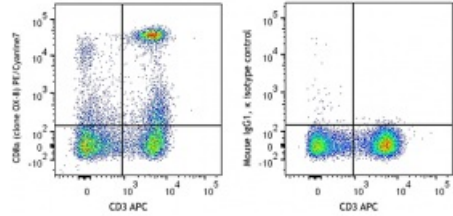
Immunogen: High molecular weight glycoproteins from rat thymocytes

Reactivity: Rat

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cyanine7 under optimal conditions. The solution is free of unconjugated PE/Cyanine7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.2 mg/ml



LOU rat splenocytes were stained with CD3 (clone 1F4) APC and CD8a (clone OX-8) PE/Cyanine7 (left) or Mouse IgG1, κ PE/Cy7 isotype control (right).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: The OX-8 antibody has been reported to partially block T cell responses, including mixed lymphocyte reactions and cytotoxic T cell responses, and to induce macrophage activation. Additional reported applications (for the relevant formats) include: immunohistochemistry^{1,2} of acetone-fixed frozen sections and formalin-fixed paraffin-embedded sections, immunoprecipitation³, *in vivo* and *in vitro* blocking of T cell responses^{3, 4}, macrophage stimulation⁵, and Western blotting^{3,6}.

- Application References:**
1. Barclay AN. 1981. *Immunology* 42:593. (IHC)
 2. Wallgren AC, et al. 1995. *Transplantation* 60:594. (IHC)
 3. Torres-Nagel N, et al. 1992. *Eur. J. Immunol.* 22:2841. (IP, WB)
 4. Mason DW, et al. 1983. *Immunol. Rev.* 74:57.
 5. Hirji N, et al. 1997. *J. Immunol.* 158:1833. (FA)
 6. Mitnacht R,, et al. 1998. *J. Immunol.* 160:700. (WB)

Description: CD8a is a 32 kD glycoprotein also known as T8, Lyt2, Ly-2, and CD8 α . CD8a is a member of the immunoglobulin superfamily expressed on most thymocytes, subset of mature T cells, most NK cells, macrophages, and some activated CD4⁺ T cells (not resting). CD8a forms heterodimers with the CD8 β chain (CD8b) on the surface of most thymocytes, while mature peripheral T lymphocytes express almost exclusively the CD8 $\alpha\beta$ heterodimer. Intestinal intraepithelial lymphocytes express CD8a without CD8b. CD8 is an antigen co-receptor on T cells that interacts with MHC class I on antigen-presenting cells or epithelial cells. CD8 participates in T cell activation through its association with the T cell receptor complex and protein tyrosine kinase lck (p56lck).

Antigen
References:

1. Johnson P, *et al.* 1985. *EMBO J.* 4:2539.
2. Thomas ML, *et al.* 1983. *Eur. J. Immunol.* 13:855.