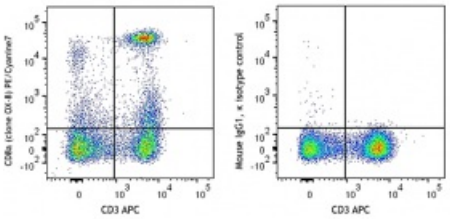
SONY

Product Data Sheet

PE/Cyanine7 anti-rat CD8a

Catalog # / Size:	1608580 / 100 µg 1608575 / 25 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, immunoprecipitation[3], *in vivo* and *in vitro* blocking of T cell responses[3, 4], macrophage stimulation[5], 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 CD8α. 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 CD8β chain (CD8b) on the surface of most thymocytes, while mature peripheral T lymphocytes express almost exclusively the CD8 αβ 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.