



Product Data Sheet

Mouse CD8a (Ly2) Antibodies and Conjugates

<input type="checkbox"/> Cat# MCD008A-M	Rat Anti-Mouse CD8a (Ly2) IgG, Unlabeled	Size: 100 tests
<input type="checkbox"/> Cat# MCD008A-F	Rat Anti-Mouse CD8a (Ly2) IgG-FITC Conjugate	Size: 100 tests
<input type="checkbox"/> Cat# MCD008A-B	Rat Anti-Mouse CD8a (Ly2) IgG-Biotin Conjugate	Size: 100 tests
<input type="checkbox"/> Cat# MCD008A-APC	Rat Anti-Mouse CD8a (Ly2) IgG-APC Conjugate	Size: 50 tests

CD8 antigen which is 68 KD type I transmembrane glycoprotein, and consists of two disulfide-linked chains that form either as α/α homodimers or α/β heterodimers. The most CD8 antigen is CD8 α/β heterodimer expressed mainly on 13-48% (about one-third of peripheral T cells) of peripheral blood lymphocytes-suppressor/cytotoxic T lymphocytes (Ts/Tc) and 70-80% of thymocytes. In addition, a proportion of $\gamma\delta$ T cells and NK cells express CD8 $\alpha\alpha$ homodimers. CD8a can form homodimers, but CD8 β cannot. CD8 β requires the presence of CD8a to be expressed on the cell surface. CD8 antigen is coreceptor for HLA class I molecule.

Rat anti-mouse CD8a antigen monoclonal antibody binds to a protein of approximately 30 Kda found on 85% of mouse thymocytes, mouse cytotoxic/suppressor T cells and their precursors. It does not bind to mouse helper/inducer T cells. This antibody is not strain specific and can be used with all commonly used laboratory mice.

The antibody is produced in rat (IgG2a). It is purified by Protein A/G and coupled to Biotin, APC, FITC, PE, Cy5 etc).

Matching rat isotype (IgG2a) Controls

Catalog#	ProdDescription
20005-12	Rat IgG2a unconjugated (isotype control)
20005-12-B	Rat IgG2a-Biotin conjugate (isotype control)
20005-12-F	Rat IgG2a-FITC conjugate (isotype control)
20005-12-HP	Rat IgG2a-HRP conjugate (isotype control)
20005-12-PC5	Rat IgG2a-R-PE-Cy5.5 conjugate
20005-12-PE	Rat IgG2a-R-PE conjugate (isotype control)
20005-12-APC	Rat IgG2a-APC conjugate (isotype control)

Cat# MCD008A-M, unlabeled

The antibody is supplied in PBS, pH 7.4, in either **lyophilized** (100 tests) or **liquid** form (lot specific volume indicated on the vial). Reconstitute powder in water. Store at -2-4oC. Stability is ~6-12 months. Do not freeze and thaw.

Cat# MCD008A-F, FITC-conjugate

Purified antibody was coupled to FITC at F/P ratio ~5. The antibody is supplied (100 tests/0.5ml) in PBS, pH 7.4, 1% BSA, 0.05% azide (see lot sp concn on the vial) or in powder form. **Reconstitute** powder in PBS. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze/thaw.

Suggested conjugate dilutions are 1:20-1:500 for immunofluorescence. Or 1 test equivalent of antibody per million cells.

Absorption @495 nm Emission @528 nm

Cat# MCD008A-B, Biotin-conjugate

Purified antibody was coupled to Biotin using Biotinamidocaproate N-Hydroxysuccinimide Ester (BAC) at F/P ratio ~10-20:1. The antibody is supplied in PBS, pH 7.4, 0.2% BSA and 0.05% azide in either **lyophilized** (0.1 mg) or **liquid** form (0.1 mg/0.1 ml). Reconstitute powder in PBS in 0.1 ml to prepare stock solution. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:5,000-1:30,000 ELISA, 1:2K-1:10K for western.

Cat# MCD008A-APC, APC-conjugate

Purified antibody was coupled to APC (Allophycocyanin). The antibody is supplied in PBS, pH 7.4, 1% BSA, and 0.05% azide in either **lyophilized** or **liquid** form (see lot specific conc on the vial). Reconstitute powder in PBS. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested applications: Suitable for immunomicroscopy and flow cytometry or FACS analysis as well as other antibody based fluorescent assays

Suggested conjugate dilutions are 1 test equivalent of antibody per million cells. Users must optimize the dilutions for a given technique.

Absorption Wavelength: 630-645 nm
Emission Wavelength: 655-660 nm

Recommended Working Dilution

Working dilution for the specific application should be determined by the investigator to obtain the best conditions and prepared immediately before use. Diluted solution should be discarded. This product can be used in immunodiffusion, ELISA, flow cytometry, immunofluorescence or immunolocalization.

Refs: Shen DCet al., 1990. J. of Immunology. 10(3):147; Yang CY. 1993. J. of Monoclonal Antibody. 9(4):42; Schlossman S., L. 1995. Leucocyte Typing V: White Cell Differentiation Antigens. P : 247 , 353—356 Oxford University Press, New York.

Related Material available for ADI

MCD008A 240430 110303A