

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects both the α and α' chains of mouse CD8 (1).
Source	Monoclonal Rat IgG _{2A} Clone # 53-6.7
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse thymus or spleen
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 μ g/10 ⁶ cells	Mouse splenocytes

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

CD8, also known as Ly-2, is a heterodimeric glycoprotein consisting of an α and β chain. It is expressed on cytolytic T cells and functions in conjunction with the T cell receptor in the recognition of MHC/peptide complexes. Mouse CD8 (containing an α /L γ -2 or α' /L γ t-2 chain) is an antigen co-receptor on the T cell surface which interacts with MHC I molecules on antigen presenting cells (1). CD8 $\alpha\beta$ heterodimer is expressed on a subpopulation of mature T cells (2, 3). CD8 α , without CD8 β , has been detected on subsets of $\gamma\delta$ TCR-bearing T cells (4), intestinal intrathymic lymphocytes (5, 6) and dendritic cells (7, 8).

References:

1. Bierer, B.E. *et al.* (1989) Annu. Rev. Immunol. **7**:579.
2. Ledbetter, J.A. *et al.* (1980) J. Exp. Med. **152**:280.
3. Hayakawa, K. *et al.* (1994) Science **263**:1131.
4. MacDonald, H.R. *et al.* (1990) Eur. J. Immunol. **20**:927.
5. Rocha, B. *et al.* (1992) Immunol. Today **13**:449.
6. Wang, J. and J.R. Klein (1994) Science **265**:1860.
7. Vermeec, D. *et al.* (1992) J. Exp. Med. **176**:47.
8. Suss, G. and K. Shortman (1996) J. Exp. Med. **183**:1789.

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