

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse ICOS in direct ELISAs.
Source	Monoclonal Rat IgG ₁ Clone # 1001423
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese Hamster Ovary cell line, CHO-derived mouse ICOS Met1-Leu142 Accession # Q9WVS0
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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 µg/10 ⁶ cells	HEK293 Human Cell Line Transfected with Mouse ICOS and eGFP

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

Mouse ICOS (inducible co-stimulator), also called AILIM (activation-inducible lymphocyte immunomediatory molecule) and CRP-1 (CD28-related protein-1), is a member of the CD28 family of immune costimulatory receptors. Other family members are CD28, CTLA-4 and PD-1. Mouse ICOS is a homodimeric type I transmembrane protein consisting of 200 amino acids (aa) with a putative 20 aa signal sequence, a 122 aa extracellular domain, a 23 aa transmembrane region, and a 35 aa cytoplasmic domain. ICOS shares approximately 39% aa similarity with CD 28 and CTLA-4. Mouse and human ICOS share approximately 72% aa identity. ICOS is expressed on most CD45RO⁺ cells. ICOS expression is upregulated within approximately 24-48 hours of activation on T_H primed cells. B7-H2, a member of the B7 family of costimulatory ligands, has been identified as the ICOS ligand. The B7-H2/ICOS interaction appears to play roles in T cell dependent B cell activation and T_H differentiation.

References:

1. Coyle, A.J. and J.C. Gutierrez-Ramos (2001) *Nat. Immunol.* **2**:203.
2. Mages, H.W. *et al.* (2000) *Eur. J. Immunol.* **30**:1040.
3. Yoshinaga, S.K. *et al.* (1999) *Nature* **402**:827.
4. Hutloff, A. *et al.* (1999) *Nature* **397**:263.
5. Aicher, A. *et al.* (2000) *J. Immunol.* **164**:4689.
6. Coyle, A.J. *et al.* (2000) *Immunity* **13**:95.
7. Gonzalo, J.A. *et al.* (2001) *J. Immunol.* **166**:1.

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