

DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse ICOS in direct ELISAs.
Source	Monoclonal Rat IgG _{2B} Clone # 670306
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with mouse ICOS Accession # Q9WVS0
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	Mouse splenocytes treated with Concanavalin A

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:

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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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