Human ICOS Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF169

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ICOS in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant mouse ICOS is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ICOS Glu21-Phe141 Accession # Q9Y6W8
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

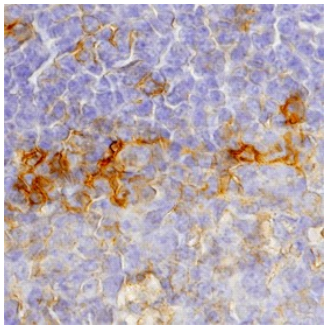
APPLICATIONS

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
Western Blot	0.1 µg/mL	Recombinant Human ICOS Fc Chimera (Catalog # 169-CS)
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



ICOS in Human Tonsil. ICOS was detected in immersion fixed paraffin-embedded sections of human tonsil using Goat Anti-Human ICOS Antigen Affinity-purified Polyclonal Antibody (Catalog # AF169) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Inducible costimulator (ICOS), also called AILIM (activiation-inducible lymphocyte immunomediatory molecule) and CRP-1 (CD28-related protein-1), is a member of the growing CD28 family of immune costimulatory receptors. Other family members are CD28, CTLA-4, and PD-1. Human ICOS is a homodimeric type I transmembrane protein consisting of 199 amino acids (aa) with a putative 20 aa signal sequence, a 121 aa extracellular domain, a 23 aa transmembrane region, and a 35 aa cytoplasmic domain. ICOS shares approximately 39% amino acid similarity with CD28 and CTLA-4. Human and mouse ICOS share approximately 72% amino acid identity. ICOS is expressed on most $CD45RO^+$ cells. ICOS expression is up-regulated 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. Coyle, A.J. and J.C. Gutierrez-Ramos (2001) Nat. Immunol. **2**:203.
4. Gonzalo, J.A. *et al.* (2001) J. Immunol. **166**:1.
5. Hutloff, A. *et al.* (1999) Nature **397**:263.
6. Mages, H.W. *et al.* (2000) Eur. J. Immunol. **30**:1040.
7. Yoshinaga, S.K. *et al.* (1999) Nature **402**:827.

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