10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# ICOS Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6146a

## Product Information

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| **Application** | IHC-P, WB, FC, E |
| **Primary Accession** | Q9Y6W8 |
| **Other Accession** | NP_036224 |
| **Reactivity** | Human |
| **Predicted** | Mouse, Rat, Bovine, Canine, Rabbit |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Calculated MW** | 22625 |
| **Antigen Region** | 156-185 |

## Additional Information

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| **Gene ID** | 29851 |
| **Other Names** | Inducible T-cell costimulator, Activation-inducible lymphocyte immunomediatory molecule, CD278, ICOS, AILIM |
| **Target/Specificity** | This ICOS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 156-185 amino acids from the C-terminal region of human ICOS. |
| **Dilution** | IHC-P~~1:100~500 WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | ICOS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | ICOS |
| **Synonyms** | AILIM |

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| **Function** | Stimulatory receptor expressed in activated or antigen- experienced T-cells that plays an important role in the immune response (PubMed:9930702). Upon binding to its ligand ICOSL expressed on antigen presenting cells (APCs), delivers costimulatory signals that enhances all basic T-cell responses to a foreign antigen, namely proliferation, secretion of lymphokines including IL10, up-regulation of molecules that mediate cell-cell interaction, and effective help for antibody secretion by B-cells (PubMed:33033255). Also acts as a costimulatory receptor critical for the differentiation of T follicular regulatory cells upon immune challenges such as viral infection (PubMed:27135603). Mechanistically, potentiates TCR-induced calcium flux by augmenting PLCG1 activation and actin remodeling (By similarity). In addition, activates PI3K signaling pathways independently of calcium flux (PubMed:30523347). Essential both for efficient interaction between T and B-cells and for normal antibody responses to T-cell dependent antigens. Prevents the apoptosis of pre-activated T-cells. Plays a critical role in CD40-mediated class switching of immunoglobin isotypes (By similarity). |
| **Cellular Location** | [Isoform 1]: Cell membrane; Single-pass type I membrane protein |
| **Tissue Location** | Activated T-cells. Highly expressed on tonsillar T- cells, which are closely associated with B-cells in the apical light zone of germinal centers, the site of terminal B-cell maturation Expressed at lower levels in thymus, lung, lymph node and peripheral blood leukocytes. Expressed in the medulla of fetal and newborn thymus |

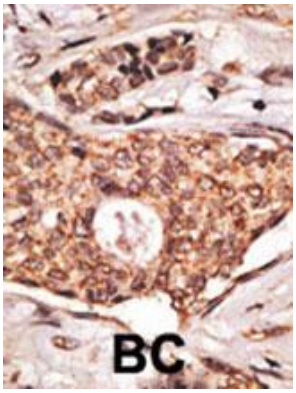
## Background

ICOS belongs to the CD28 and CTLA-4 cell-surface receptor family. It forms homodimers and plays an important role in cell-cell signaling, immune responses, and regulation of cell proliferation.

## References

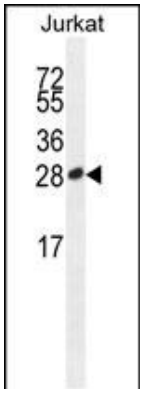

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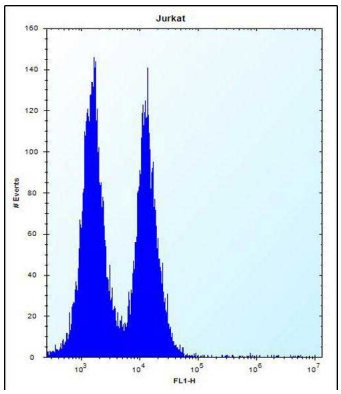

## Images




Formalin-fixed and paraffin-embedded human lymph with ICOS Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ICOS-S171 (Cat. #AP6146a) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the ICOS antibody detected the ICOS protein (arrow).




ICOS Antibody (C-term) (Cat. #AP6146a) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.