

# ICOS Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6146a

## Product Information

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<b>Application</b>	IHC-P, WB, FC, E
<b>Primary Accession</b>	<a href="#">Q9Y6W8</a>
<b>Other Accession</b>	<a href="#">NP_036224</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Calculated MW</b>	22625
<b>Antigen Region</b>	156-185

## Additional Information

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<b>Gene ID</b>	29851
<b>Other Names</b>	Inducible T-cell costimulator, Activation-inducible lymphocyte immunomediatory molecule, CD278, ICOS, AILIM
<b>Target/Specificity</b>	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.
<b>Dilution</b>	IHC-P~~1:100~500 WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	ICOS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ICOS
<b>Synonyms</b>	AILIM
<b>Function</b>	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 immunoglobulin 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

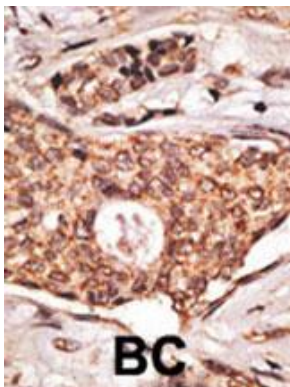
## Background

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

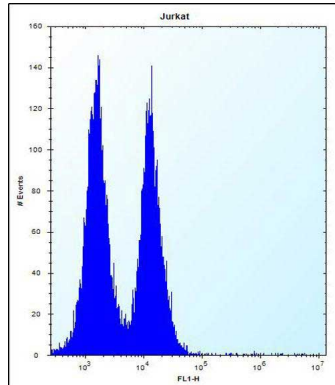
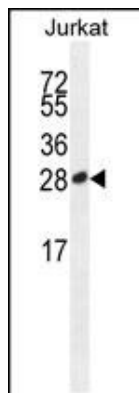
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 Riley, J.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(18):11790-11795 (2002).  
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## Images



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'.