

ICOS Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6146a

Specification

ICOS Antibody (C-term) - Product Information

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

ICOS Antibody (C-term) - Additional Information

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 WB~~1:1000 FC~~1:10~50 IHC-P~~1:50~100 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.

ICOS Antibody (C-term) - Protein Information



Name ICOS

Synonyms AILIM

Function Stimulatory receptor expressed in activated or antigen- experienced T-cells that plays an important role in the immune response (PubMed:<u>9930702</u>). 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:<u>33033255</u>). Also acts as a costimulatory receptor critical for the differentiation of T follicular regulatory cells upon immune challenges such as viral infection (PubMed:<u>27135603</u>). 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:<u>30523347</u>). 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

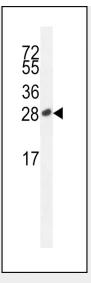
ICOS Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

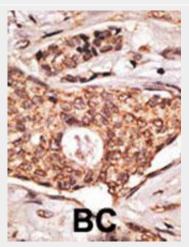
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ICOS Antibody (C-term) - Images

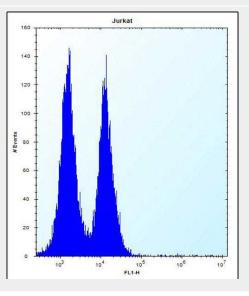




ICOS-S171 (Cat. #AP6146a) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the ICOS antibody detected the ICOS protein (arrow).



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 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.

ICOS Antibody (C-term) - 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.

ICOS Antibody (C-term) - References

Okamoto, N., et al., Biochem. Biophys. Res. Commun. 310(3):691-702 (2003). Okamoto, T., et al., J. Rheumatol. 30(6):1157-1163 (2003). Riley, J.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(18):11790-11795 (2002). Haimila, K.E., et al., Immunogenetics 53(12):1028-1032 (2002). Witsch, E.J., et al., Eur. J. Immunol. 32(9):2680-2686 (2002).