

ICOS Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF2982a

Specification

ICOS Antibody (internal region) - Product Information

Application

Primary Accession <u>Q9Y6W8</u>

Other Accession <u>NP_036224.1</u>, <u>29851</u>, <u>54167 (mouse)</u>

Predicted Human, Mouse

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml

Isotype IgG
Calculated MW 22625

ICOS Antibody (internal region) - Additional Information

Gene ID 29851

Other Names

Inducible T-cell costimulator, Activation-inducible lymphocyte immunomediatory molecule, CD278, ICOS, AILIM

Dilution

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ICOS Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

ICOS Antibody (internal region) - 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:<a



href="http://www.uniprot.org/citations/9930702" target="_blank">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

ICOS Antibody (internal region) - Protocols

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

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

ICOS Antibody (internal region) - Images

ICOS Antibody (internal region) - References

Expression of ICOS on human melanoma-infiltrating CD4+CD25highFoxp3+ T regulatory cells: implications and impact on tumor-mediated immune suppression. Strauss L, Bergmann C, Szczepanski MJ, Lang S, Kirkwood JM, Whiteside TL, J Immunol. 2008 Mar 1;180(5):2967-80. PMID: 18292519