

ICOS Antibody
Rabbit Polyclonal Antibody
Catalog # ALS17079**Specification**

ICOS Antibody - Product Information

Application	WB, IHC-P, IF
Primary Accession	O9Y6W8
Other Accession	29851
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	22625
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200

ICOS Antibody - Additional Information**Gene ID** 29851**Other Names**

ICOS, AILIM, CD278, CVID1, Inducible costimulator, Inducible T-cell co-stimulator, CD278 antigen, Inducible T-cell costimulator

Target/Specificity

Human ICOS

Reconstitution & Storage

PBS, pH 7.3, 0.02% sodium azide, 50% glycerol. Long term: -80°C; Short term: -20°C. Avoid freeze-thaw cycles.

Precautions

ICOS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ICOS Antibody - 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: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

Volume

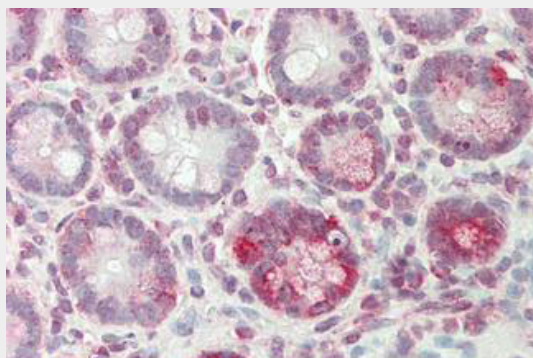
50 µl

ICOS Antibody - Protocols

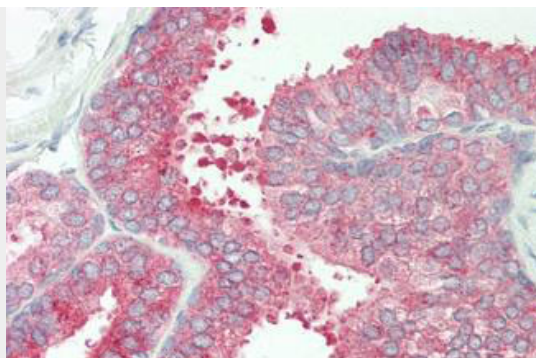
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

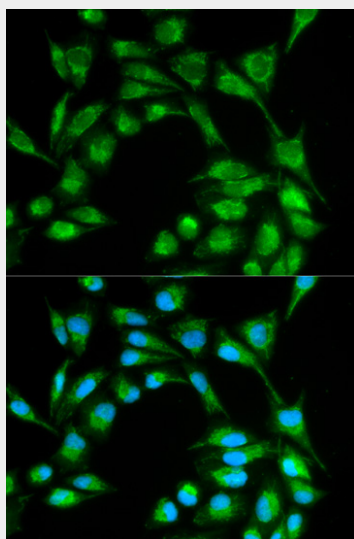
ICOS Antibody - Images



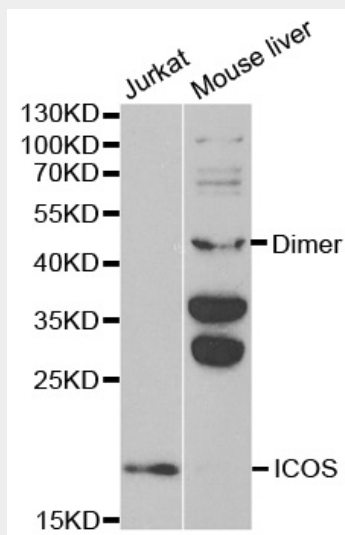
Human Small Intestine: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Prostate: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunofluorescence analysis of MCF7 cell using ICOS antibody. Blue: DAPI for nuclear staining.



Western blot analysis of extracts of various cell lines, using ICOS antibody.

ICOS Antibody - Background

Enhances all basic T-cell responses to a foreign antigen, namely proliferation, secretion of lymphokines, up- regulation of molecules that mediate cell-cell interaction, and effective help for antibody secretion by B-cells. Essential both for efficient interaction between T and B-cells and for

normal antibody responses to T-cell dependent antigens. Does not up-regulate the production of interleukin-2, but superinduces the synthesis of interleukin-10. Prevents the apoptosis of pre-activated T-cells. Plays a critical role in CD40-mediated class switching of immunoglobulin isotypes (By similarity).

ICOS Antibody - References

Hutloff A., et al. *Nature* 397:263-266(1999).
Tezuka K., et al. *Biochem. Biophys. Res. Commun.* 276:335-345(2000).
Aicher A., et al. *J. Immunol.* 164:4689-4696(2000).
Ling V., et al. *Genomics* 78:155-168(2001).
Haaning Andersen A.D., et al. *Tissue Antigens* 61:276-285(2003).