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

ICOS Polyclonal Antibody

Catalog # AP73896

Product Information

Application	WB, IHC-P
Primary Accession	Q9Y6W8
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22625

Additional Information

Gene ID	29851
Other Names	ICOS; AILIM; Inducible T-cell costimulator; Activation-inducible lymphocyte immunomediatory molecule; CD278
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-1:300. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

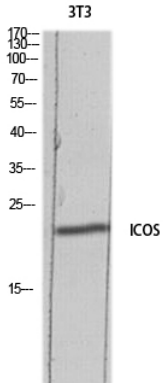
Name	ICOS
Synonyms	AILIM
Function	Stimulatory receptor expressed in activated or antigen- experienced T-cells that plays an important role in the immune response (PubMed:9930702). Upon binding to its ligand ICOSL expressed on antigen presenting cells (APCs), delivers costimulatory signals that enhances 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 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

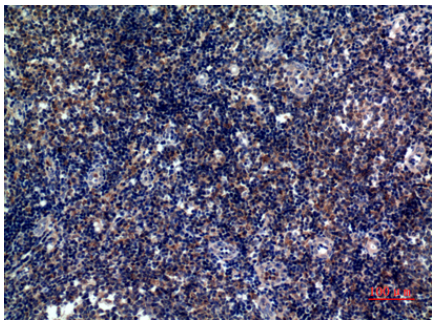
Background

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 immunoglobin isotypes (By similarity).

Images



Western blot analysis of 3T3 lysis using ICOS antibody. Antibody was diluted at 1:500. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-tonsils, antibody was diluted at 1:100