

# ICOS / CD278 Antibody

Rabbit Anti Human Polyclonal Antibody

Catalog # ABV11727

## Product Information

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<b>Application</b>	WB, IHC, FC
<b>Primary Accession</b>	<a href="#">Q9Y6W8</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Calculated MW</b>	22625

## Additional Information

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<b>Gene ID</b>	29851
<b>Positive Control</b>	WB: Jurkat cell lysate, FC: Jurkat cells, IHC: human lymph
<b>Application &amp; Usage</b>	WB; 1:1000, IHC-P; 1:50~100, FC; 1:10~51
<b>Other Names</b>	Inducible T-cell costimulator, Activation-inducible lymphocyte immunomediatory molecule, CD278, ICOS, AILIM
<b>Target/Specificity</b>	ICOS
<b>Antibody Form</b>	Liquid
<b>Appearance</b>	Colorless liquid
<b>Formulation</b>	PBS with 0.09% (W/V) sodium azide.
<b>Handling</b>	The antibody solution should be gently mixed before use.
<b>Reconstitution &amp; Storage</b>	-20 °C
<b>Background Descriptions</b>	
<b>Precautions</b>	ICOS / CD278 Antibody 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: <a href="#">9930702</a> ).

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

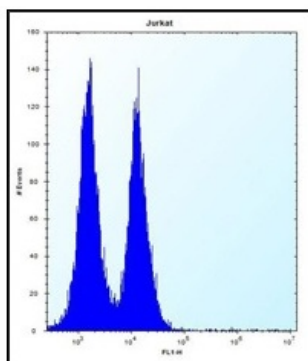
#### Tissue Location

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

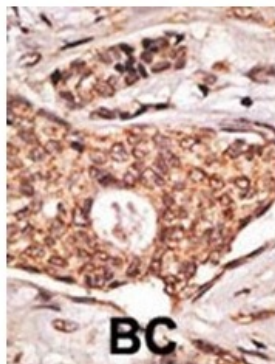
### Background

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.

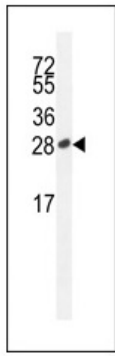
### Images



FC analysis of Jurkat cells.



Western blot analysis of CD27 antibody in Jurkat cell lysates.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.