10320 Camino Santa Fe, Suite G
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ICOS / CD278 Antibody
Rabbit Anti Human Polyclonal Antibody
Catalog # ABV11727

Specification

ICOS / CD278 Antibody - Product Information

Application	**WB, IHC, FC**
Primary Accession	Q9Y6W8
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**22625**

ICOS / CD278 Antibody - Additional Information

Gene ID 29851

Positive Control	**WB: Jurkat cell lysate, FC: Jurkat cells, IHC: human lymph**
Application & Usage	**WB; 1:1000, IHC-P; 1:50~100, FC; 1:10~51**

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

Target/Specificity
ICOS

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
PBS with 0.09% (W/V) sodium azide.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
ICOS / CD278 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ICOS / CD278 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 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 / CD278 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 Cytomety
- Cell Culture

ICOS / CD278 Antibody - Images

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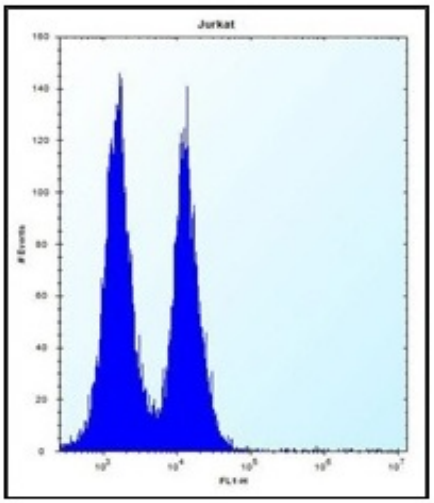
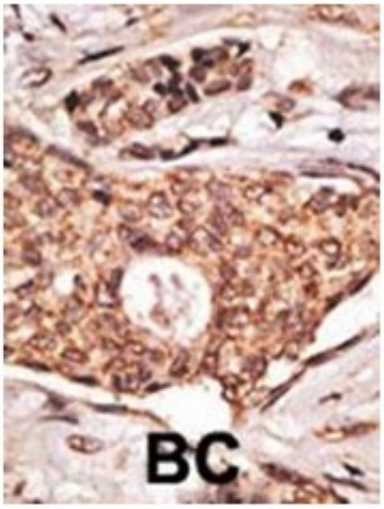
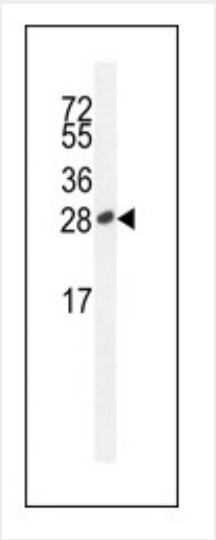


FC analysis of Jurkat cells.





Western blot analysis of CD27 antibody in Jurkat cell lysates.

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ICOS / CD278 Antibody - 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.