

Anti-CD278 Antibody

Catalog # AP95542

Product Information

Application	FC, IF/IC
Primary Accession	Q9Y6W8
Reactivity	Human, Mouse, Rat
Host	Armenian Hamster
Clonality	Monoclonal (clone: C398.4A)
Calculated MW	22625

Additional Information

Gene ID	29851
Other Names	AILIM; Inducible T-cell costimulator; Activation-inducible lymphocyte immunomediatory molecule; CD278
Target/Specificity	Mouse T cell clone D10.G4.1
Dilution	FC~~1:10~50 IF/IC~~N/A
Format	Armenian Hamster IgG. Liquid in PBS, pH 7.3, and 0.02% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

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