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# Anti-CD278-AcalephFluor488-labled

Catalog # AP100604

## Product Information

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| **Application** | FC, IF/IC |
| **Primary Accession** | Q9WVS0 |
| **Reactivity** | Mouse |
| **Clonality** | Monoclonal |
| **Calculated MW** | 22709 |

## Additional Information

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| **Gene ID** | 54167 |
| **Other Names** | AILIM; Inducible T-cell costimulator; Activation-inducible lymphocyte immunomediatory molecule; CD278 |
| **Target/Specificity** | Recognizes mouse CD278 |
| **Dilution** | FC~~1:10~50 IF/IC~~N/A |
| **Format** | Rat IgG2b kappa. Liquid in PBS, pH 7.3, 0.2% BSA, and 0.02% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

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| **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:11343123). 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:10657606). Also acts as a costimulatory receptor critical for the differentiation of T follicular regulatory cells upon immune challenges such as viral infection (PubMed:36754569). Mechanistically, potentiates TCR-induced calcium flux by augmenting PLCG1 activation and actin remodeling (PubMed:27693916). In addition, activates PI3K signaling pathways independently of calcium flux (PubMed:19915142, PubMed:27693916). 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 |

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| | (PubMed:11343122). |
| **Cellular Location** | Cell membrane {ECO:0000250\|UniProtKB:Q9Y6W8}; Single-pass type I membrane protein |
| **Tissue Location** | Expressed on activated T-cells and resting memory T-cells. High expression seen in the thymic medulla and in the germinal centers and T-cell zones of lymph nodes and Peyer patches. Expressed at low levels in the spleen. |

## Background

AcalephFluor488-labled rat monoclonal antibody to CD278

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