

## Product datasheet

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# ARG56089 anti-CD3e antibody [CRIS-7]

Package: 50 μg Store at: -20°C

#### **Summary**

Clone

Product Description Mouse Monoclonal antibody [CRIS-7] recognizes CD3e

Tested Reactivity Hu

Tested Application FACS, ICC/IF
Host Mouse

Clonality Monoclonal

Isotype IgG2a, kappa

Target Name CD3e
Species Human

Immunogen Stimulated Human leukocytes.

CRIS-7

Conjugation Un-conjugated

Alternate Names T-cell surface antigen T3/Leu-4 epsilon chain; T3E; TCRE; T-cell surface glycoprotein CD3 epsilon chain;

IMD18; CD antigen CD3e

### **Application Instructions**

Application table	Application	Dilution
	FACS	1 - 2 μg/10^6 cells
	ICC/IF	1 - 2 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Purification with Protein G.

Buffer PBS (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA

Preservative 0.05% Sodium azide

Stabilizer 0.1 mg/ml BSA

Concentration 0.2 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Database links <u>GeneID: 916 Human</u>

Swiss-port # P07766 Human

Gene Symbol CD3E

Gene Full Name CD3e molecule, epsilon (CD3-TCR complex)

Background CD3 subunit complex is crucial in transducing antigen-recognition signals into the cytoplasm of T cells

and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta. These CD3 subunits are structurally related members of the immunoglobulins superfamily encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules. This association is mediated at least in part by a double tyrosine-based motif present in a single copy in the CD3 subunits.

CD3 may play a role in TCR-induced growth arrest, cell survival and proliferation.

Function CD3: Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in

adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways

(PubMed:2470098). In addition of this role of signal transduction in T-cell activation, CD3E plays an essential role in correct T-cell development. Initiates the TCR-CD3 complex assembly by forming the two heterodimers CD3D/CD3E and CD3G/CD3E. Participates also in internalization and cell surface down-regulation of TCR-CD3 complexes via endocytosis sequences present in CD3E cytosolic region

(PubMed:10384095, PubMed:26507128). [UniProt]

Highlight Related products:

CD3 antibodies; CD3 ELISA Kits; CD3 Duos / Panels; Anti-Mouse IgG secondary antibodies;

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Tumor-Infiltrating Lymphocytes (TILs)

Research Area Cancer antibody; Developmental Biology antibody; Immune System antibody; Lymphocyte Marker

antibody; Inflammatory Cell Marker antibody; T-cell Marker antibody; T-cell infiltration Study antibody;

Tumor-infiltrating Lymphocyte Study antibody

Calculated Mw 23 kDa

Cellular Localization Cell surface and cytoplasmic