

## **Product datasheet**

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# ARG21977 anti-CD3e antibody [145-2C11] (low endotoxin)

Package: 250 μg Store at: -20°C

### Summary

Product Description Azide free and low endotoxin Hamster Monoclonal antibody [145-2C11] recognizes CD3e

Tested Reactivity Ms

Tested Application BL, Cell-Act , Depletion, FACS, IHC-P, IP, WB

Specificity Mouse CD3a
Host Hamster
Clonality Monoclonal
Clone 145-2C11

Isotype IgG1
Target Name CD3e
Species Mouse

Immunogen H-2Kb-specific Mouse cytotoxic T-lymphocyte (CTL) clone BM10-37

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
	BL	Assay-dependent
	Cell-Act	Assay-dependent
	Depletion	Assay-dependent
	FACS	Assay-dependent
	IHC-P	Assay-dependent
	IP	Assay-dependent
	WB	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form	Liquid
Purification Note	Low endotoxin
Buffer	PBS

Concentration 0.5 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. 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.

**Note** For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links <u>GeneID: 12501 Mouse</u>

Swiss-port # P22646 Mouse

Gene Symbol CD3E

Gene Full Name CD3 antigen, epsilon polypeptide

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]

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

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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