

## Product datasheet

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# ARG21114 anti-CD3e antibody [PPT3] (PE)

Package: 50 μg Store at: 4°C

## **Summary**

Product Description PE-conjugated Mouse Monoclonal antibody [PPT3] recognizes CD3e

Tested Reactivity Pig

Tested Application FACS, IHC-Fr, IHC-P, WB

Specificity Porcine CD3s. The clone PPT3 is mitogenic when presented to peripheral blood mononuclear cells in

immobilized form.

Host Mouse

Clonality Monoclonal

Clone PPT3

Isotype IgG1, kappa

Target Name CD3e
Species Pig

Immunogen Purified CD3 molecules from porcine thymus

Conjugation PE

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	< 0.2 μg/10^6 cells
	IHC-Fr	Assay-dependent
	IHC-P	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

Buffer PBS, 0.1% Sodium azide and Sucrose.

Preservative 0.1% Sodium azide

Stabilizer Sucrose

Concentration 0.1 mg/ml

Storage instruction Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. 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 GeneID: 397455 Pig

Swiss-port # Q7YRN2 Pig

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;

Related news:

New antibody panels and duos for Tumor immune microenvironment

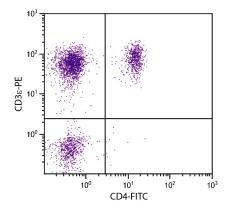
Tumor-Infiltrating Lymphocytes (TILs)

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;

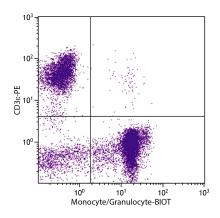
Tumor-infiltrating Lymphocyte Study antibody

Calculated Mw 23 kDa



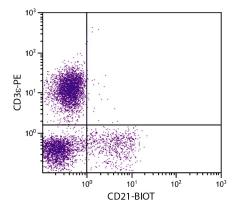
### ARG21114 anti-CD3e antibody [PPT3] (PE) FACS image

Flow Cytometry: Porcine peripheral blood lymphocytes stained with <u>ARG21114</u> anti-CD3e antibody [PPT3] (PE) and <u>ARG21121</u> anti-CD4 antibody [74-12-4] (FITC).



#### ARG21114 anti-CD3e antibody [PPT3] (PE) FACS image

Flow Cytometry: Porcine small lymphocytes, monocytes, and granulocytes stained with <u>ARG21132</u> anti-Monocyte + Granulocyte antibody [74-22-15] (Biotin) and <u>ARG21114</u> anti-CD3e antibody [PPT3] (PE).



### ARG21114 anti-CD3e antibody [PPT3] (PE) FACS image

Flow Cytometry: Porcine peripheral blood lymphocytes stained with <u>ARG21136</u> anti-CD21 antibody [BB6-11C9.6] (Biotin) and <u>ARG21114</u> anti-CD3e antibody [PPT3] (PE).