

DATASHEET
CD3e Rabbit Polyclonal Antibody
CAT. NO. APA14979
KEY FEATURES

Target	CD3e	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC, IP	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

BACKGROUND

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 CD247/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 . CD3E ITAM phosphorylation creates docking sites for the protein kinase ZAP70 leading to ZAP70 phosphorylation and its conversion into a catalytically active enzyme .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200
IP	1:20 - 1:50

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to CD3e
Specificity	Recognizes endogenous levels of CD3e protein.
Antibody Type	Primary antibody
Immunogen	Recombinant protein of human CD3e . The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 23 kD; Observed: 23 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	T3E; T-cell surface glycoprotein CD3 epsilon chain; T-cell surface antigen T3/Leu-4 epsilon chain; CD3e
Gene Symbol	CD3E
Entrez Gene	916(Human); 12501(Mouse)
SwissProt	P07766(Human); P22646(Mouse)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

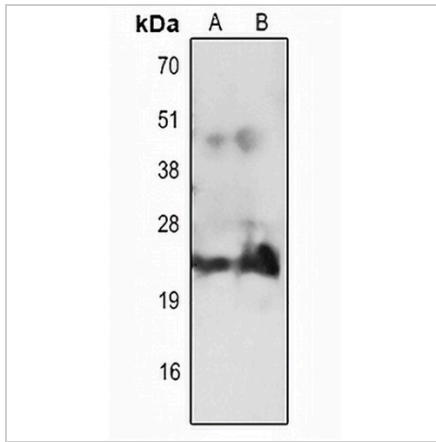
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

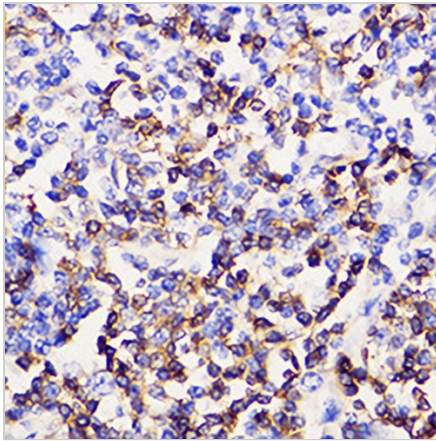
CD3e Rabbit Polyclonal Antibody

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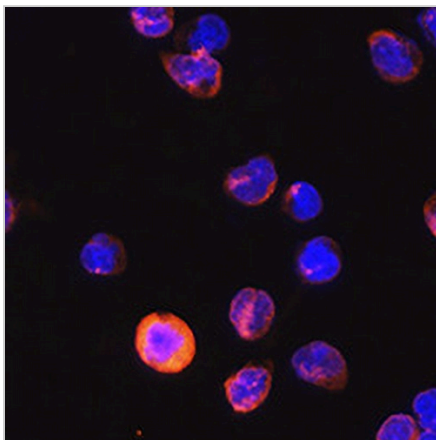
DATA



Western blot analysis of CD3e expression in Jurkat (A), mouse thymus (B) whole cell lysates. (Predicted band size: 23 kD; Observed band size: 23 kD)



Immunohistochemical analysis of CD3e staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CD3e staining in Jurkat cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.