ARG66483
anti-CD3e antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes CD3e
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b, kappa
Target Name	CD3e
Species	Human
Immunogen	Synthetic peptide derived from Human CD3e.
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
IHC-P	1:100 - 1:500
WB	1:500 - 1:2000

Application Note: IHC-P: Antigen Retrieval: Citrate buffer (pH 6.0) was used.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: 23 kDa

Properties

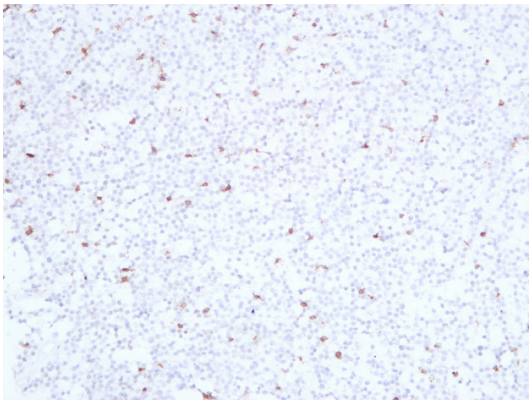
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.5% BSA
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. 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

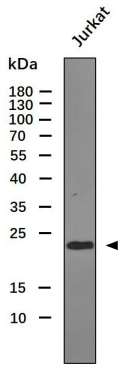
Gene Symbol	CD3E
Gene Full Name	CD3e molecule, epsilon (CD3-TCR complex)
Background	CD3 subunit complex is crucial in transducing antigen-recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (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
Cellular Localization	Cell membrane; Single-pass type I membrane protein. [UniProt]

Images



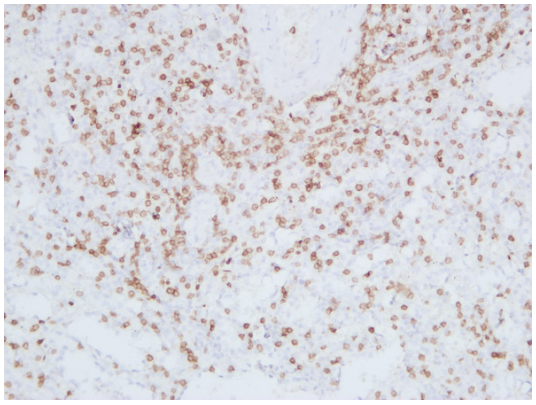
ARG66483 anti-CD3e antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human diffuse large B-cell lymphoma stained with ARG66483 anti-CD3e antibody at 1:200 (4°C, overnight). Antigen Retrieval: Citrate buffer (pH 6.0) was used.



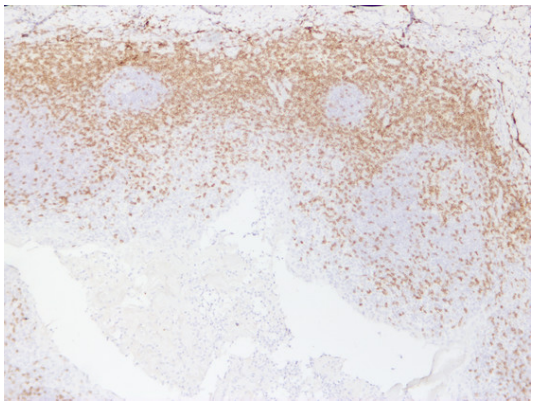
ARG66483 anti-CD3e antibody WB image

Western blot: 30 µg of Jurkat whole cell lysate stained with ARG66483 anti-CD3e antibody at 1:1000 dilution.



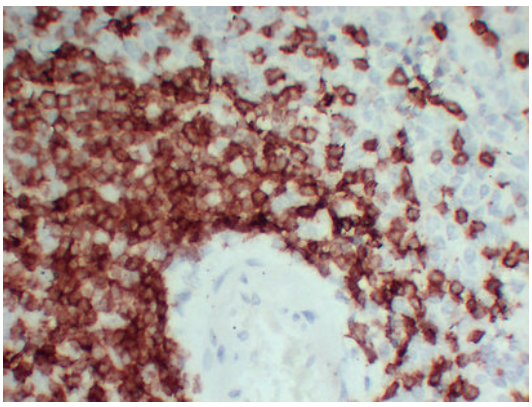
ARG66483 anti-CD3e antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human spleen stained with ARG66483 anti-CD3e antibody at 1:200 (4°C, overnight). Antigen Retrieval: Citrate buffer (pH 6.0) was used.



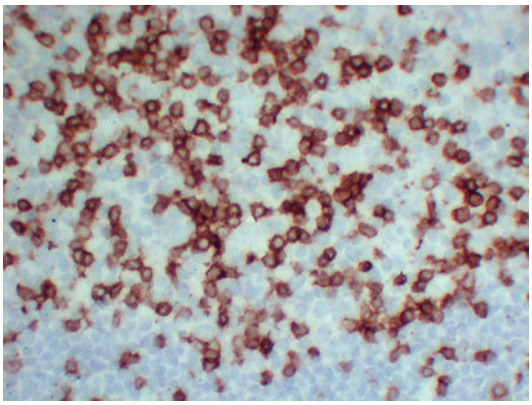
ARG66483 anti-CD3e antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil stained with ARG66483 anti-CD3e antibody at 1:200 (4°C, overnight). Antigen Retrieval: Citrate buffer (pH 6.0) was used.



ARG66483 anti-CD3e antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human spleen (high magnification) stained with ARG66483 anti-CD3e antibody at 1:200 (4°C, overnight). Antigen Retrieval: Citrate buffer (pH 6.0) was used.



ARG66483 anti-CD3e antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil (high magnification) stained with ARG66483 anti-CD3e antibody at 1:200 (4°C, overnight). Antigen Retrieval: Citrate buffer (pH 6.0) was used.