

ARG65550 anti-CD3 epsilon antibody [UCHT1]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [UCHT1] recognizes CD3 epsilon
Tested Reactivity	Hu, NHuPrm
Tested Application	CyTOF®-candidate, FACS, FuncSt, ICC/IF, IHC-Fr, IP
Specificity	The clone UCHT1 recognizes the CD3 antigen of the TCR/CD3 complex on mature human T cells. The UCHT1 antibody reacts with the epsilon chain of the CD3 complex. HLDA I; WS Code T 3 HLDA III; WS Code T 126 HLDA III; WS Code T 471 HLDA VI; WS Code T 6T-CD3.1
Host	Mouse
Clonality	Monoclonal
Clone	UCHT1
Isotype	IgG1
Target Name	CD3 epsilon
Species	Human
Immunogen	human thymocytes followed by Sezary T cells
Conjugation	Un-conjugated
Alternate Names	CD3E; CD3 Epsilon Subunit Of T-Cell Receptor Complex; T-Cell Surface Glycoprotein CD3 Epsilon Chain; CD3e Antigen, Epsilon Polypeptide (TiT3 Complex); T-Cell Surface Antigen T3/Leu-4 Epsilon Chain; CD3e Molecule, Epsilon (CD3-TCR Complex); CD3-Epsilon; CD3epsilon

Application Instructions

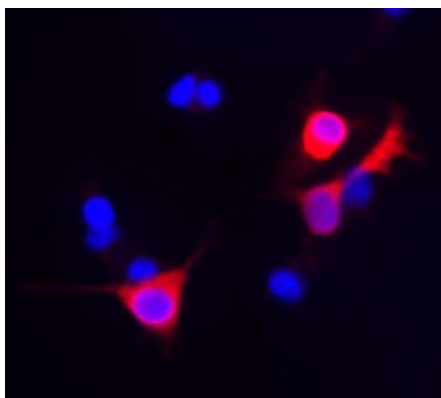
Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	FACS	1 - 4 µg/ml
	FuncSt	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IP	Assay-dependent
Application Note	<p>FACS and IHC-Fr: The epitope for UCHT1, CD3 is resistant to fixation. For purposes where pre-fixed cells are stained, this antibody is recommended.</p> <p>Functional studies: The immobilized UCHT1 antibody initiates a signaling pathway resulting in T cell activation and proliferation.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>	

Properties

Form	Liquid
Purification	Purified from cell culture supernatant by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
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 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.
Note	For laboratory research only, not for drug, diagnostic or other use.

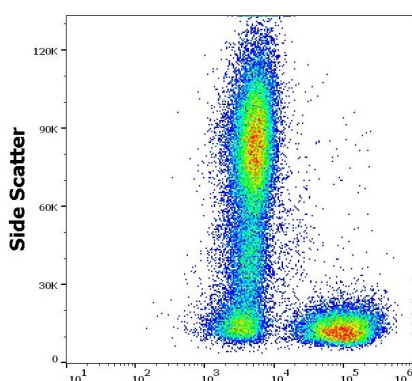
Bioinformation

Database links	GeneID: 915 Human Swiss-port # P04234 Human
Gene Symbol	CD3E
Gene Full Name	CD3 Epsilon Subunit Of T-Cell Receptor Complex
Background	The protein encoded by this gene is the CD3-epsilon polypeptide, which together with CD3-gamma, -delta and -zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T-cell receptor-CD3 complex. This complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. The epsilon polypeptide plays an essential role in T-cell development. Defects in this gene cause immunodeficiency. This gene has also been linked to a susceptibility to type I diabetes in women.
Function	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.
Highlight	Related products: CD3 antibodies ; CD3 ELISA Kits ; CD3 Duos / Panels ; CD3 recombinant proteins ; Anti-Mouse IgG secondary antibodies ; Related news: CyTOF-candidate Antibodies New antibody panels and duos for Tumor immune microenvironment Tumor-Infiltrating Lymphocytes (TILs) Exploring Antiviral Immune Response
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	19 kDa
Cellular Localization	Cell membrane, Membrane



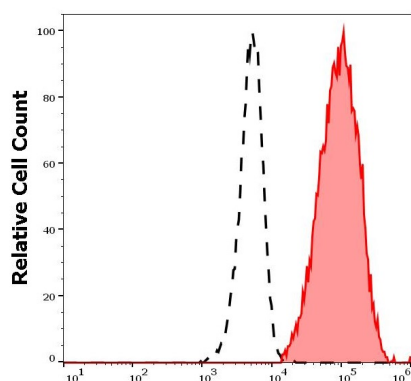
ARG65550 anti-CD3 epsilon antibody [UCHT1] ICC/IF image

Immunofluorescence: Human CD3 epsilon and CD3 gamma transfected COS cells stained with ARG65550 anti-CD3 epsilon antibody [UCHT1] (red). DAPI (blue) for nuclear staining.



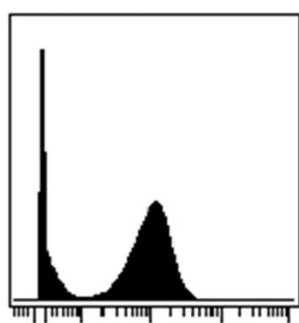
ARG65550 anti-CD3 epsilon antibody [UCHT1] FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG65550 anti-CD3 epsilon antibody [UCHT1] at 2 μ g/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.



ARG65550 anti-CD3 epsilon antibody [UCHT1] FACS image

Flow Cytometry: Separation of human CD3 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG65550 anti-CD3 epsilon antibody [UCHT1] at 2 μ g/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.



CD3 Yb174

ARG65550 anti-CD3 epsilon antibody [UCHT1] CyTOF image

CyTOF: PBMC (after Ficoll-Paque separation) stained with ARG65550 anti-CD3 epsilon antibody [UCHT1] (Yb174). Singlet cells were gated for data analysis.