# ARG53820
# anti-CD3 epsilon antibody [UCHT1] (PE)

Package: 100 tests
Store at: 4°C

## Summary

| | |
|---|---|
| Product Description | PE-conjugated Mouse Monoclonal antibody [UCHT1] recognizes CD3 epsilon |
| Tested Reactivity | Hu, NHuPrm |
| Tested Application | FACS |
| 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.<br>HLDA I; WS Code T 3<br>HLDA III; WS Code T 126<br>HLDA III; WS Code T 471<br>HLDA VI; WS Code T 6T-CD3.1 |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | UCHT1 |
| Isotype | IgG1 |
| Target Name | CD3 epsilon (activation epitope) |
| Species | Human |
| Immunogen | human thymocytes followed by Sezary T cells |
| Conjugation | PE |
| 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 |
|---|---|
| FACS | 20 µl / 10^6 cells |

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

## Properties

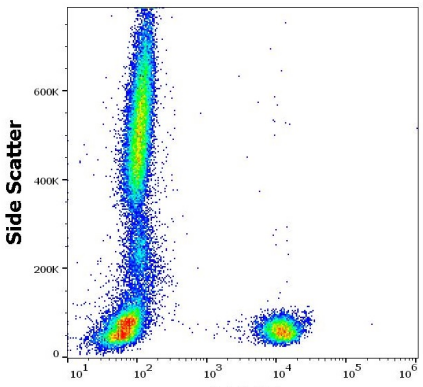
| | |
|---|---|
| Form | Liquid |
| Purification Note | The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary. |
| Buffer | PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA |
| Preservative | 15 mM Sodium azide |

| | |
|---|---|
| Stabilizer | 0.2% (w/v) high-grade protease free BSA |
| 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

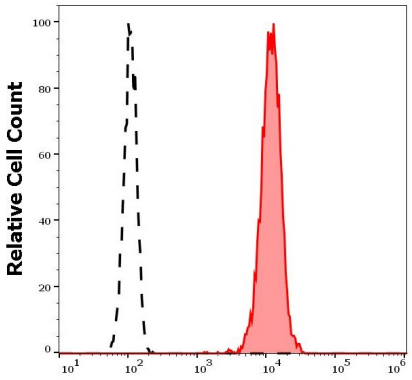
| | |
|---|---|
| Database links | GeneID: 915 Human<br><br>Swiss-port # P04234 Human |
| Gene Symbol | CD3E |
| Gene Full Name | CD3 Epsilon Subunit Of T-Cell Receptor Complex |
| Background | The protein encoded by this gene is the CD3-epsilon polypeptide, which together with CD3-gamma, -delta and -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. |
| Calculated Mw | 19 kDa |
| Cellular Localization | Cell membrane, Membrane |

## Images




ARG53820 anti-CD3 epsilon antibody [UCHT1] (PE) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG53820 anti-CD3 epsilon antibody [UCHT1] (PE) (20 µl reagent / 100 µl of peripheral whole blood).




ARG53820 anti-CD3 epsilon antibody [UCHT1] (PE) FACS image

Flow Cytometry: Separation of human CD3 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG53820 anti-CD3 epsilon antibody [UCHT1] (PE) (20 µl reagent / 100 µl of peripheral whole blood).