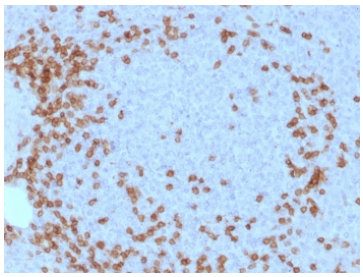
CD3e Antibody for FACS / T Cell Immunophenotyping Marker [clone C3e/1931] (V3683)

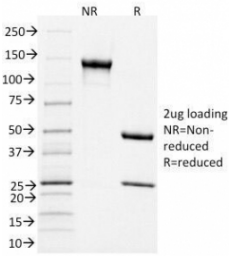
Catalog No.	Formulation	Size
V3683-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3683-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3683SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

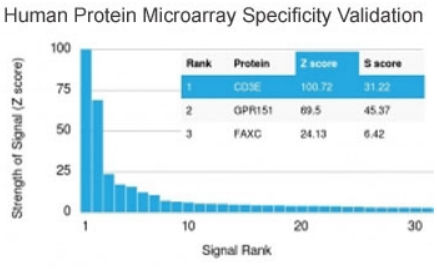
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C3e/1931
Purity	Protein G affinity chromatography
UniProt	P07766
Localization	Cell surface and cytoplasmic
Applications	ELISA: 2-4ug/ml (order BSA/azide-free format) Flow cytometry: 1-2ug/10^6 cells Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD3e antibody is available for research use only.



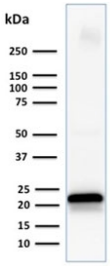
IHC testing of human spleen tissue with CD3e antibody (clone C3e/1931). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min.



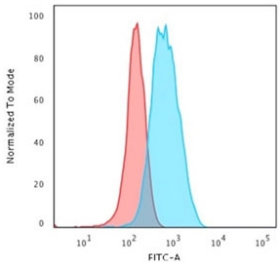
SDS-PAGE analysis of purified, BSA-free CD3e antibody (clone C3e/1931) as confirmation of integrity and purity.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD3e antibody (clone C3e/1931). These results demonstrate the foremost specificity of the C3e/1931 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



Western blot testing of human Jurkat cell lysate with CD3e antibody (clone C3e/1931).



CD3e Antibody for FACS. Flow cytometry analysis of CD3 Epsilon / CD3E antibody staining in human Jurkat cells using CD3e Antibody for FACS as a T cell immunophenotyping marker (clone C3e/1931). A clear rightward shift of the blue histogram relative to the isotype control (red) demonstrates strong detection of CD3-positive cells with well-resolved population separation. The staining pattern supports accurate identification and gating of T-cell populations in flow cytometry-based immunophenotyping applications.

Description

CD3 epsilon (CD3E) is a membrane-associated component of the T-cell receptor (TCR) complex that is uniformly expressed on T lymphocytes and serves as a primary marker for defining T-cell populations. CD3e Antibody for FACS / CD3 Epsilon Flow Cytometry Antibody is specifically optimized for flow cytometry-based detection of CD3 Epsilon / CD3E, enabling precise identification and gating of T cells within complex cell mixtures. CD3e antibody, also known as CD3 epsilon antibody or CD3E antibody, is widely recognized as a pan-T cell marker antibody and is foundational to immunophenotyping workflows.

CD3 epsilon forms part of the CD3 signaling complex together with CD3 gamma, CD3 delta, and CD3 zeta chains, which associate with the TCR alpha-beta or gamma-delta heterodimer at the cell surface. This stable surface expression makes CD3 epsilon ideally suited for flow cytometry, where detection of membrane proteins enables rapid and quantitative discrimination of immune cell subsets. CD3e antibody reagents allow clear separation of CD3-positive T cells from CD3-negative populations such as B cells, NK cells, and myeloid cells.

In flow cytometry applications, CD3e Antibody for FACS functions as a primary gating marker, forming the backbone of T-cell identification strategies. CD3-positive events are first resolved within lymphocyte gates based on forward and side scatter, after which they are used to define total T-cell populations. This gating step is critical for downstream analysis, including subdivision into CD4-positive helper T cells and CD8-positive cytotoxic T cells. The reliability of CD3e antibody staining directly impacts the accuracy of these gating hierarchies and overall data interpretation.

This CD3e Antibody for FACS is uniquely positioned for immunophenotyping applications where clean population separation and reproducible gating are essential. Strong signal intensity and low non-specific background enable clear distinction between positive and negative populations, even in complex samples such as peripheral blood mononuclear cells or dissociated tissues. The ability to generate tight, well-resolved CD3-positive clusters supports consistent analysis across experiments and sample types.

In addition to defining T-cell populations, CD3 epsilon flow cytometry antibody reagents are widely used in studies examining immune composition and cell population dynamics. Quantification of CD3-positive cells provides insight into lymphocyte distribution and immune status, while also serving as a reference population for multi-parameter panels. This makes CD3e antibody reagents essential in both basic immunology and translational research settings.

As a rabbit polyclonal antibody, this CD3e Antibody for FACS provides multi-epitope recognition of CD3 epsilon, supporting robust signal generation and consistent detection across diverse sample preparations. CD3 epsilon Antibody for FACS serves as a core reagent for T-cell identification, enabling accurate gating and high-quality immunophenotyping in flow cytometry-based assays.

A full range of CD3e antibody reagents for immunohistochemistry, western blot, and flow cytometry is available on our CD3e Antibody collection page.

Application Notes

Optimal dilution of the CD3e Antibody for FACS / T Cell Immunophenotyping Marker should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A recombinant human partial protein corresponding to amino acids 23-119 from the human CD3 epsilon chain were used as the immunogen for the CD3e Antibody for FACS / T Cell Immunophenotyping Marker.

Storage

Store the CD3e antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD3E antibody, CD3 flow cytometry antibody, T cell immunophenotyping antibody, CD3 lymphocyte marker antibody, CD3 gating antibody

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