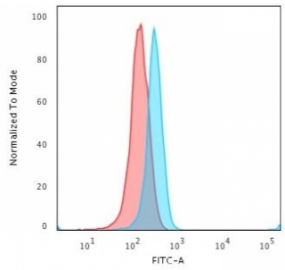
CD3e Antibody for FACS / T Cell Activation and Immune Profiling Marker [clone C3e/2478] (V3751)

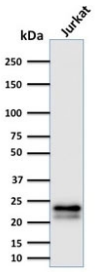
Catalog No.	Formulation	Size
V3751-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3751-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3751SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

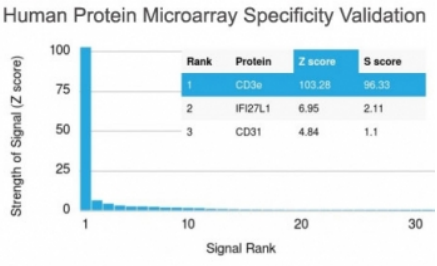
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C3e/2478
Purity	Protein G affinity chromatography
UniProt	P07766
Localization	Cell surface and cytoplasmic
Applications	Flow cytometry: 1-2ug/10^6 cells ELISA: 2-4ug/ml (order BSA/azide-free format) Western blot: 1-2ug/ml
Limitations	This CD3e antibody is available for research use only.



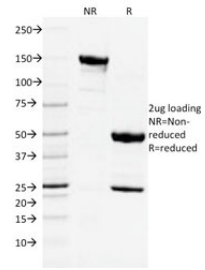
CD3e Antibody for FACS. Flow cytometry analysis of CD3 Epsilon / CD3E antibody staining in human Jurkat cells using CD3e Antibody for FACS as a T cell activation and immune profiling marker with clone C3e/2478. A pronounced rightward shift of the blue histogram compared to the isotype control (red) demonstrates specific detection of CD3-positive cells with tight population resolution. The clear separation supports accurate identification of T-cell populations and reliable downstream immune profiling in flow cytometry applications.



Western blot testing of human Jurkat cells with CD3e antibody (clone C3e/2478). Expected molecular weight ~23 kDa.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD3e antibody (clone C3e/2478). These results demonstrate the foremost specificity of the C3e/2478 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.



SDS-PAGE analysis of purified, BSA-free CD3e antibody (clone C3e/2478) as confirmation of integrity and purity.

Description

CD3 epsilon (CD3E) is a critical signaling component of the T-cell receptor (TCR) complex that is required for antigen recognition and downstream activation of T lymphocytes. CD3e Antibody for FACS / CD3 Epsilon Flow Cytometry Antibody enables fluorescence-based detection of CD3 Epsilon / CD3E, supporting detailed analysis of T-cell activation states and immune profiling in flow cytometry applications. CD3e antibody, also known as CD3 epsilon antibody or CD3E antibody, is widely used as a pan-T cell marker antibody and plays a central role in defining functional T-cell populations.

Within the TCR complex, CD3 epsilon associates with CD3 gamma, CD3 delta, and CD3 zeta chains to form a signaling platform that initiates intracellular activation cascades upon antigen engagement. This direct involvement in T-cell activation makes CD3 epsilon a key marker for studying immune signaling, functional responses, and T-cell behavior under different biological conditions. CD3e antibody reagents are therefore commonly used in experiments focused on immune activation, differentiation, and response to stimuli.

In flow cytometry, CD3e Antibody for FACS enables identification of T cells while also providing a framework for deeper functional analysis. Once CD3-positive populations are defined, additional markers can be applied to evaluate activation status, cytokine production, or differentiation state. This allows comprehensive immune profiling, where CD3 serves not only as a lineage marker but also as a gateway to functional characterization of T-cell subsets.

This CD3e Antibody for FACS is uniquely positioned for immune profiling applications where both accurate T-cell identification and high specificity are required. Clone C3e/2478 has demonstrated strong target recognition supported by protein microarray specificity data, indicating selective binding to CD3 epsilon with minimal cross-reactivity. This level of specificity is particularly important in multi-color flow cytometry panels, where non-specific binding can interfere with interpretation of closely related immune cell populations.

The inclusion of microarray specificity validation provides an additional layer of confidence in the antibody's performance, supporting its use in complex experimental designs where precise antigen recognition is critical. In flow cytometry, this translates to cleaner separation of CD3-positive populations and reduced background signal, enabling more accurate analysis of T-cell subsets and activation states.

CD3 epsilon flow cytometry antibody reagents are widely used in studies of infection, cancer, and immune-mediated diseases, where characterization of T-cell responses is essential. The ability to quantify and profile CD3-positive cells across conditions supports investigations into immune regulation and therapeutic response. By combining CD3 detection with additional markers, researchers can build detailed profiles of immune cell function and composition.

As a monoclonal antibody, clone C3e/2478 provides consistent epitope recognition and reproducible performance across experiments. CD3 epsilon Antibody for FACS using this clone supports high-confidence detection of T cells and enables robust immune profiling in flow cytometry-based research applications.

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 Activation and Immune Profiling Marker should be determined by the researcher.

Immunogen

A portion of amino acids 23-119 were used as the immunogen for the CD3e Antibody for FACS / T Cell Activation and Immune Profiling 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 activation marker antibody, CD3 immune profiling antibody, T cell activation antibody, CD3 signaling marker antibody

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