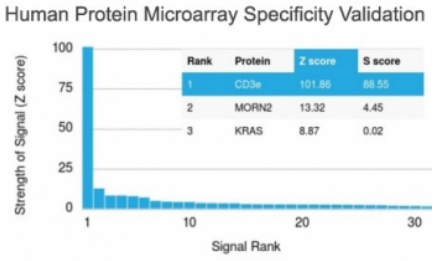
CD3e Antibody / Microarray Specificity Validated Antibody [clone C3e/2479] (V3752)

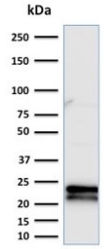
Catalog No.	Formulation	Size
V3752-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3752-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3752SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

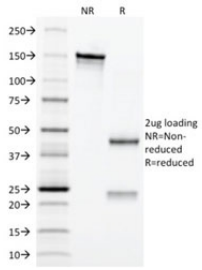
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C3e/2479
Purity	Protein G affinity chromatography
UniProt	P07766
Localization	Cell surface and cytoplasmic
Applications	ELISA : 2-4ug/ml (order BSA/azide-free format) Western Blot : 1-2ug/ml
Limitations	This CD3e antibody is available for research use only.



CD3e Antibody. Protein microarray specificity analysis of CD3 Epsilon / CD3E antibody using CD3e Antibody / Microarray Specificity Validated Antibody (clone C3e/2479). Screening against a HuProt(TM) array containing more than 19,000 full-length human proteins demonstrates highly selective binding to CD3 epsilon, which ranks as the top signal with a strong Z score and clear separation from all other proteins. Minimal secondary signals are observed, supporting low cross-reactivity. Z score represents signal intensity in standard deviations above the array mean, while S score reflects the specificity gap between the top-ranked target and subsequent proteins. These results confirm the high specificity of clone C3e/2479 for CD3 epsilon and support its use in applications requiring precise target recognition.



CD3e Antibody. Western blot analysis of CD3 Epsilon / CD3E antibody in human Jurkat cell lysate using CD3e Antibody / Microarray Specificity Validated Antibody (clone C3e/2479). A band is detected at approximately 20-25 kDa, consistent with the predicted molecular weight of CD3 epsilon. The clean band pattern with minimal background supports specific target recognition, aligning with the protein microarray validation profile of clone C3e/2479 and confirming reliable detection of CD3 epsilon in cell lysates.



SDS-PAGE analysis of purified, BSA-free CD3e antibody (clone C3e/2479) as confirmation of integrity and purity.

Description

CD3 epsilon (CD3E) is a transmembrane signaling component of the T-cell receptor (TCR) complex that is consistently expressed in T lymphocytes and plays a central role in antigen recognition and downstream activation. CD3e Antibody / Microarray Specificity Validated Antibody is designed to detect CD3 Epsilon / CD3E with a high degree of confidence, supported by protein microarray-based specificity validation. CD3e antibody, also known as CD3 epsilon antibody or CD3E antibody, is widely recognized as a pan-T cell marker antibody and is routinely used in studies of T-cell biology, immune signaling, and lymphocyte characterization.

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 complex is essential for initiating intracellular signaling cascades that regulate T-cell activation, proliferation, and differentiation. Because CD3 epsilon is a core component of this signaling machinery, accurate and specific detection is critical for interpreting T-cell-related data across a wide range of experimental systems.

This CD3e Antibody / Microarray Specificity Validated Antibody is uniquely positioned for applications where antibody specificity is a primary concern. Clone C3e/2479 has been evaluated using protein microarray technology, enabling comprehensive screening of antibody binding against thousands of human proteins in parallel. This large-scale approach provides a detailed specificity profile, confirming selective recognition of CD3 epsilon while minimizing cross-reactivity with non-target proteins. Such validation extends beyond traditional single-target testing and offers a broader assessment of antibody performance in complex biological environments.

Protein microarray specificity validation is particularly valuable in experiments involving multiplex detection, closely related protein families, or heterogeneous samples where non-specific binding can lead to misleading results. By demonstrating selective binding across a wide protein landscape, this CD3e antibody provides an additional layer of assurance that detected signals correspond to true CD3 epsilon expression. This is especially important in immune profiling and signaling studies, where accurate identification of T-cell populations underpins downstream analysis.

The use of a microarray-validated CD3e antibody can reduce the risk of false-positive signals and improve reproducibility across experiments. In complex lysates, tissue samples, or multi-marker panels, even low-level cross-reactivity can compromise data interpretation. The specificity profile of clone C3e/2479 supports cleaner signal detection, improved confidence in results, and more reliable comparison across experimental conditions.

As a mouse monoclonal antibody, clone C3e/2479 provides consistent epitope recognition and batch-to-batch

reproducibility. When combined with protein microarray specificity validation, this format delivers a high-confidence reagent for detecting CD3 epsilon. CD3e Antibody / Microarray Specificity Validated Antibody is well suited for research applications requiring precise target recognition, supporting accurate analysis of T-cell biology, immune signaling, and cellular composition.

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 / Microarray Specificity Validated Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 23-119 were used as the immunogen for the CD3e Antibody / Microarray Specificity Validated Antibody.

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 epsilon specificity validated antibody, CD3 microarray validated antibody, CD3 antigen epsilon chain antibody, T cell marker specificity antibody