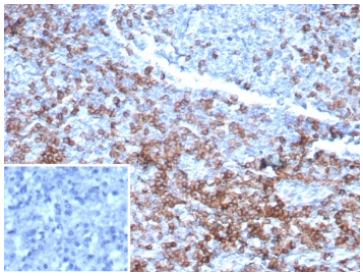
CD3e Antibody Recombinant Mouse Monoclonal Clone rC3e/6967 / CD3 Epsilon [clone rC3e/6967] (V4209)

Catalog No.	Formulation	Size
V4209-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4209-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4209SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant | MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rC3e/6967
Purity	Protein A/G affinity
UniProt	P07766
Localization	Cell surface, Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This CD3e antibody is available for research use only.



CD3e Antibody Recombinant Mouse Monoclonal. Immunohistochemistry analysis of CD3 Epsilon / CD3E antibody in FFPE human lymph node tissue using CD3e Antibody Recombinant Mouse Monoclonal Clone rC3e/6967. Strong HRP-DAB brown membranous and cytoplasmic staining is observed in T lymphocytes within paracortical regions, consistent with T-cell zone localization, while surrounding non-lymphoid cells show minimal background. The inset shows the negative control with PBS used in place of the primary antibody, demonstrating absence of non-specific staining. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to antibody incubation.

Description

CD3 epsilon (CD3E) is a membrane-associated signaling component of the T-cell receptor (TCR) complex that is consistently expressed in T lymphocytes and is essential for antigen recognition and intracellular signaling. CD3e Antibody Recombinant Mouse Monoclonal using Clone rC3e/6967 enables detection of CD3E with controlled epitope specificity and reproducible performance, supporting analysis of T-cell populations across a range of research applications. CD3e antibody, also known as CD3 epsilon antibody or CD3E antibody, is widely used as a pan-T cell marker antibody.

CD3 epsilon functions within the CD3 complex alongside CD3 gamma, CD3 delta, and CD3 zeta chains, forming a signaling platform that associates with the TCR alpha-beta or gamma-delta heterodimer. This complex initiates intracellular signaling cascades following antigen engagement, regulating T-cell activation, proliferation, and differentiation. Because of its central role in immune signaling, CD3 epsilon is a key target for studies of T-cell biology and immune responses.

CD3e Antibody Recombinant Mouse Monoclonal is uniquely positioned for applications requiring stable and well-defined epitope recognition. Clone rC3e/6967 provides consistent monoclonal binding characteristics, supporting reproducible detection of CD3 epsilon across different experimental conditions. Mouse monoclonal antibodies have long been valued for their predictable performance, and the recombinant format further enhances this stability by fixing the antibody sequence.

The recombinant production of Clone rC3e/6967 ensures strong lot-to-lot consistency, reducing variability that can arise in traditional antibody generation methods. This is particularly important in experiments that rely on consistent signal output, such as comparative analyses, longitudinal studies, or multi-batch workflows. Reliable performance across experiments allows researchers to interpret changes in CD3 epsilon expression with greater confidence.

In practical workflows, CD3e antibody reagents are used to identify T-cell populations across diverse sample types, including peripheral blood, lymphoid tissues, and cultured cells. Clone rC3e/6967 supports these applications by providing stable and reproducible detection of CD3 epsilon, enabling accurate identification of CD3-positive populations in complex samples.

The controlled binding properties of recombinant mouse monoclonal antibodies also contribute to reduced variability in signal intensity and improved comparability between experiments. This makes Clone rC3e/6967 particularly useful in standardized assay systems or collaborative studies where consistent reagent performance is essential.

As a recombinant mouse monoclonal antibody, Clone rC3e/6967 provides defined epitope recognition and reproducible detection of CD3 epsilon. CD3e Antibody Recombinant Mouse Monoclonal serves as a dependable tool for studying T-cell biology, immune signaling, and cellular composition with strong consistency across experimental conditions.

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 Recombinant Mouse Monoclonal Clone rC3e/6967 should be determined by the researcher.

Immunogen

A recombinant partial protein (within amino acids 1-200) from the human protein was used as the immunogen for the CD3e Antibody Recombinant Mouse Monoclonal Clone rC3e/6967.

Storage

Aliquot the CD3e antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD3E antibody, CD3 recombinant mouse antibody, CD3 mouse monoclonal antibody, CD3 epsilon recombinant antibody, CD3 T cell marker antibody