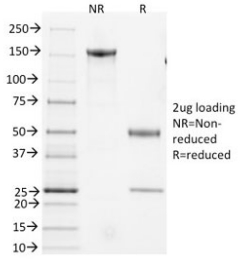
CD3e Antibody Clone 145-2C11 / CD3 Epsilon Monoclonal Antibody [clone 145-2C11] (V8271)

Catalog No.	Formulation	Size
V8271-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8271-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8271SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Purified
Clonality	Monoclonal (hamster origin)
Isotype	Armenian Hamster IgG, kappa
Clone Name	145-2C11
Purity	Protein A affinity chromatography
UniProt	P07766
Localization	Cell surface, cytoplasmic
Applications	Functional Studies (order BSA/azide-free Format) : Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml
Limitations	This CD3e antibody is available for research use only.



CD3e Antibody Clone 145-2C11. SDS-PAGE analysis of purified, BSA-free CD3 Epsilon / CD3E antibody using CD3e Antibody Clone 145-2C11 / CD3 Epsilon Monoclonal Antibody. Two conditions are shown: NR (non-reduced) and R (reduced). Under non-reducing conditions, the antibody migrates as an intact immunoglobulin at approximately 150 kDa, while under reducing conditions distinct bands corresponding to heavy chain at approximately 50 kDa and light chain at approximately 25 kDa are observed. The clear band pattern with minimal background confirms the integrity and purity of the antibody preparation.

Description

CD3 epsilon (CD3E) is a critical signaling component of the T-cell receptor (TCR) complex that is expressed on T lymphocytes and is required for antigen recognition and intracellular signaling. CD3e Antibody Clone 145-2C11 / CD3 Epsilon Monoclonal Antibody enables detection of CD3 Epsilon / CD3E and represents one of the most extensively used CD3 antibodies in immunological research. CD3e antibody, also known as CD3 epsilon antibody or CD3E antibody, is widely used as a pan-T cell marker antibody for identifying T-cell populations across experimental systems.

Within the TCR complex, CD3 epsilon associates with CD3 gamma, CD3 delta, and CD3 zeta chains to form a signaling platform that initiates intracellular signaling cascades following antigen engagement. These signaling events regulate T-cell activation, proliferation, differentiation, and effector function, making CD3 epsilon a central molecule in adaptive immune responses. Detection of CD3 epsilon is therefore fundamental for studying T-cell biology and immune system dynamics.

CD3e Antibody Clone 145-2C11 is uniquely positioned as a highly influential clone with exceptional representation in the literature, with more than eight thousand peer-reviewed publications documenting its use. This extensive body of work reflects its central role in mouse immunology and establishes 145-2C11 as a dominant clone for studying T-cell function in murine systems. Its widespread adoption has made it a standard reagent in experimental models of immunity, inflammation, and disease.

Clone 145-2C11 is particularly associated with functional studies of T-cell activation and signaling in mouse models. Its consistent performance in detecting CD3 epsilon in murine T cells has contributed to its use in a wide range of experimental contexts, including in vivo and ex vivo analyses. The scale of its literature presence provides strong support for its reliability and makes it a preferred choice for researchers working within established mouse immunology frameworks.

In experimental applications, CD3e antibody reagents are used to identify T-cell populations in lymphoid tissues, peripheral blood, and cultured cells derived from murine systems. Accurate detection of CD3-positive cells is essential for analyzing immune composition and functional responses. Clone 145-2C11 supports these applications by providing consistent recognition of CD3 epsilon and enabling reliable identification of T-cell populations.

The extensive publication history of Clone 145-2C11 also supports its use in studies requiring alignment with prior work in mouse immunology. Researchers frequently select this clone to ensure continuity with existing datasets and to facilitate comparison across experiments. Its widespread use across thousands of studies reinforces its position as a foundational reagent in the field.

As a monoclonal antibody, Clone 145-2C11 provides consistent epitope recognition and reproducible performance across experiments. CD3e Antibody Clone 145-2C11 serves as a highly validated and widely adopted tool for detecting CD3 epsilon, supporting research focused on T-cell identification, immune signaling, and functional immunology in murine models.

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 Clone 145-2C11 / CD3 Epsilon Monoclonal Antibody should be determined by the researcher.

Immunogen

The H2Kb-specific mouse cytotoxic T lymphocyte clone BM10 37 was used as the immunogen for the CD3e Antibody Clone 145-2C11 / CD3 Epsilon Monoclonal 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 145-2C11 antibody, CD3 mouse T cell antibody, CD3 functional antibody, CD3 antigen epsilon chain antibody