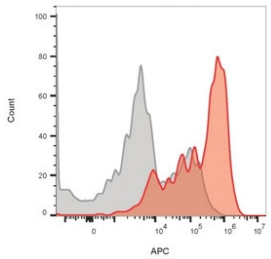
CD3e Antibody Clone OKT3 / CD3 Epsilon Monoclonal Antibody [clone OKT3] (V8204)

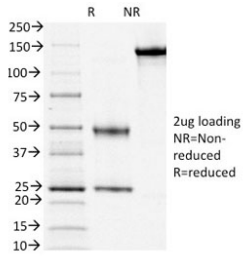
Catalog No.	Formulation	Size
V8204-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8204-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8204SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	OKT3
Purity	Protein G affinity chromatography
UniProt	P07766
Localization	Cell surface, cytoplasmic
Applications	Flow cytometry: 1-2ug/10^6 cells Immunohistochemistry (acetone fixed frozen sections) Immunofluorescence: 1-2ug/ml Functional Studies (order BSA/azide-free format)
Limitations	This CD3e antibody is available for research use only.



CD3e Antibody Clone OKT3. Flow cytometry analysis of CD3 Epsilon / CD3E antibody staining in lymphocyte-gated human peripheral blood mononuclear cells using CF640R-labeled CD3e Antibody Clone OKT3 / CD3 Epsilon Monoclonal Antibody. A pronounced rightward shift of the red histogram relative to the unstained control (gray) demonstrates specific detection of CD3-positive T cells within the lymphocyte population. The clear population separation supports accurate identification and immunophenotyping of T-cell subsets in flow cytometry analysis.



SDS-PAGE analysis of purified, BSA-free CD3e antibody clone OKT3 as confirmation of integrity and purity.

Description

CD3 epsilon (CD3E) is a membrane-associated signaling component of the T-cell receptor (TCR) complex that is uniformly expressed on T lymphocytes and is essential for antigen recognition and downstream signal transduction. CD3e Antibody Clone OKT3 / CD3 Epsilon Monoclonal Antibody enables detection of CD3 Epsilon / CD3E and represents one of the most extensively characterized CD3 antibodies in immunology research. CD3e antibody, also known as CD3 epsilon antibody or CD3E antibody, is widely recognized as a pan-T cell marker antibody and is foundational for identifying T-cell populations in diverse experimental systems.

CD3 epsilon functions as 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 responsible for initiating intracellular signaling cascades following antigen engagement, regulating T-cell activation, proliferation, and differentiation. Because CD3 epsilon is a central component of this signaling machinery, accurate detection is critical for studies of T-cell biology and immune response mechanisms.

CD3e Antibody Clone OKT3 is uniquely positioned as a landmark clone with extensive representation in the scientific literature, with more than two thousand peer-reviewed publications describing its use. This level of adoption reflects long-standing trust in its performance and has established OKT3 as a reference-standard reagent for CD3 detection. Its widespread use across decades of research provides a strong foundation for reproducibility and experimental comparability.

Clone OKT3 is particularly associated with human T-cell studies, where it has been extensively used to examine T-cell activation, receptor signaling, and immune regulation. Its consistent performance in detecting CD3 epsilon in human-derived samples has contributed to its continued use in both foundational and ongoing research. The breadth of literature associated with this clone allows researchers to align new findings with a large body of existing data, which is especially valuable in translational and comparative studies.

In experimental settings, CD3e antibody reagents are used to identify T-cell populations within peripheral blood, lymphoid tissues, and cultured cell systems such as Jurkat cells. Reliable detection of CD3-positive cells is essential for defining immune cell composition and interpreting signaling events. Clone OKT3 supports these applications by providing stable and reproducible recognition of CD3 epsilon across sample types.

The extensive publication history of Clone OKT3 also supports its role as a benchmarking reagent. Researchers often select this clone when experimental design requires alignment with established methodologies or when reproducibility across studies is a priority. Its continued use in the literature reinforces its position as a widely accepted standard for CD3 detection.

As a monoclonal antibody, Clone OKT3 provides consistent epitope recognition and reproducible performance across experiments. CD3e Antibody Clone OKT3 remains a cornerstone reagent for detecting CD3 epsilon and is well suited for studies of T-cell identification, immune signaling, and functional immunology in human systems.

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 OKT3 / CD3 Epsilon Monoclonal Antibody should be determined by the researcher.

Immunogen

Human PBMC were used as the immunogen for the CD3e Antibody Clone OKT3 / 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 OKT3 antibody, CD3 OKT3 monoclonal antibody, CD3 T cell marker antibody, CD3 antigen epsilon chain antibody

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