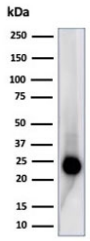
CD3 Epsilon Antibody for WB / CD3e Western Blot Antibody [clone C3e/4653R] (V9434)

Catalog No.	Formulation	Size
V9434-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9434-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9434SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

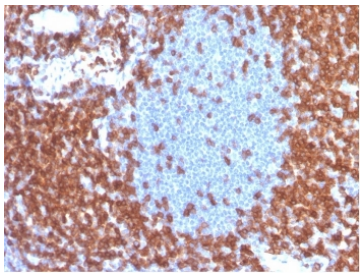
Recombinant RABBIT MONOCLONAL

Bulk quote request

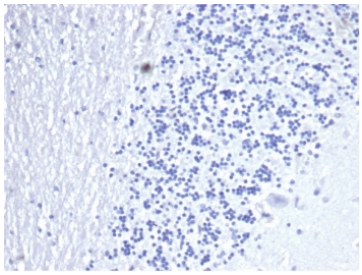
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	C3e/4653R
Purity	Protein A/G affinity
UniProt	P07766
Localization	Cell Surface, Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 1-2ug/ml
Limitations	This recombinant CD3 epsilon antibody is available for research use only.



CD3 Epsilon Antibody for WB. Western blot analysis of CD3 Epsilon / CD3E antibody in human Jurkat cell lysate using CD3 Epsilon Antibody for WB / CD3e Western Blot Antibody (clone C3e/4653R). Lane 1: human Jurkat cell lysate. A band is detected at approximately 23 kDa, consistent with the predicted molecular weight of CD3 epsilon. The strong, well-defined band with minimal background demonstrates high signal clarity and supports reliable detection of CD3E in western blot analysis.



IHC staining of FFPE human tonsil tissue with recombinant CD3e antibody (clone CD3e/4653R) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Negative control: IHC staining of FFPE human brain tissue using recombinant CD3 epsilon antibody (clone C3e/4653R) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

CD3 epsilon (CD3E) is a transmembrane signaling component of the T-cell receptor (TCR) complex that is consistently expressed in T lymphocytes and is essential for antigen recognition and downstream signal transduction. CD3 Epsilon Antibody for WB / CD3e Western Blot Antibody is specifically designed for protein-level detection of CD3E in lysates, with emphasis on strong band clarity, reproducible target recognition, and dependable western blot performance. CD3e antibody, also known as CD3 epsilon antibody or CD3E antibody, is widely recognized as a pan-T cell marker antibody and is frequently used to confirm T-cell-associated protein expression in immunoblot workflows.

CD3 epsilon functions together with CD3 gamma, CD3 delta, and CD3 zeta as part of the CD3 signaling complex, which associates with the TCR alpha-beta or gamma-delta heterodimer at the cell membrane. This receptor-associated complex is required for initiating intracellular signaling after antigen engagement. Because CD3 epsilon is a relatively small membrane-associated component of a multi-subunit signaling assembly, western blot detection benefits from antibodies that provide clean recognition of the target band without excessive background or ambiguous secondary reactivity.

In western blot applications, CD3 Epsilon Antibody for WB typically detects CD3 epsilon at approximately 20-25 kDa, consistent with the expected molecular weight of the protein. In T-cell-derived lysates such as Jurkat cells, this band provides a direct readout of CD3 epsilon expression and supports confirmation of TCR complex components at the protein level. A sharp, well-defined signal at the expected size is particularly important in western blot analysis because low molecular weight proteins can otherwise be obscured by non-specific background or faint off-target bands.

This CD3 Epsilon Antibody for WB is uniquely positioned for experiments where analytical clarity and signal quality are especially important. Clone C3e/4653 is a recombinant rabbit monoclonal antibody, a format that supports consistent epitope recognition and strong lot-to-lot reproducibility. That consistency is valuable in western blot workflows where researchers need dependable band patterns across repeat experiments, optimization runs, and comparative studies. For users prioritizing clean immunoblot data, recombinant monoclonal design offers a meaningful differentiator.

CD3e Western Blot Antibody performance is also strengthened by the ability of clone C3e/4653 to support low-background detection in complex lysates. In immunoblotting, the interpretive value of an antibody often depends not just on whether the target band is present, but on how clearly that band is resolved relative to surrounding signal. Clean band morphology, minimal haze, and reduced non-specific reactivity improve confidence in target assignment and make downstream densitometric or comparative analysis more reliable. This is particularly useful when CD3 epsilon expression is being assessed across multiple conditions or treatment groups.

Because CD3 epsilon is associated with membrane-rich signaling structures, efficient extraction and solubilization remain

important considerations in western blot sample preparation. Under appropriate lysis conditions, CD3 Epsilon Antibody for WB can provide robust detection of CD3E as a discrete band suitable for confirmation of T-cell identity, validation of Jurkat or other T-cell-derived lysates, and monitoring of experimental changes in receptor-associated protein expression. The ability to generate a strong, interpretable band at the expected molecular weight makes this antibody valuable for protein validation studies centered on T-cell biology.

As a recombinant rabbit monoclonal antibody, clone C3e/4653 combines precise epitope recognition with reproducible western blot performance. CD3 Epsilon Antibody for WB / CD3e Western Blot Antibody is well suited for researchers seeking clean band resolution, consistent results, and high-confidence detection of CD3 epsilon in immunoblot-based studies of T-cell signaling and protein expression.

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 recombinant CD3 Epsilon Antibody for WB / CD3e Western Blot Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 100-200 was used as the immunogen for the CD3 Epsilon Antibody for WB / CD3e Western Blot Antibody.

Storage

Aliquot the recombinant CD3 epsilon antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD3E antibody, CD3 epsilon WB antibody, CD3 western blot antibody, CD3 recombinant antibody, CD3 protein detection antibody

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