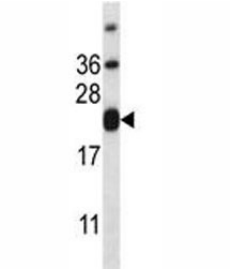
CD3e Antibody / Tumor Immune Infiltration Marker Antibody (F43038)

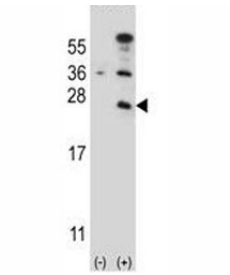
Catalog No.	Formulation	Size
F43038-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F43038-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Primate
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P07766
Applications	Western Blot : 1:1000
Limitations	This CD3e antibody is available for research use only.



CD3e Antibody. Western blot analysis of CD3 Epsilon / CD3E antibody using CD3e Antibody / Tumor Immune Infiltration Marker Antibody in human HL-60 cell lysate. Lane 1: human HL-60 cell lysate. A band is detected at approximately 23 kDa, consistent with the predicted molecular weight of CD3 epsilon. The signal is weak to absent, consistent with the lack of CD3 expression in HL-60 cells, a myeloid lineage cell line, supporting specificity of the antibody for T-cell-associated targets.



Western blot analysis of CD3e Antibody / Tumor Immune Infiltration Marker Antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (2) with the CD3E gene.

Description

CD3 epsilon (CD3E) is a membrane-associated component of the T-cell receptor (TCR) complex that is consistently expressed on T lymphocytes and plays a central role in antigen recognition and immune response. CD3e Antibody / Tumor Immune Infiltration Marker Antibody enables detection of CD3 Epsilon / CD3E and is widely used to assess T-cell presence within tumor tissues. CD3e antibody, also known as CD3 epsilon antibody or CD3E antibody, is commonly referred to as a tumor immune infiltration marker antibody because it enables identification of tumor-infiltrating lymphocytes within the tumor microenvironment.

This CD3e Antibody is uniquely positioned for evaluating immune cell infiltration in solid tumors and hematologic malignancies. CD3 epsilon forms part of the CD3 complex together with CD3 gamma, CD3 delta, and CD3 zeta chains, which associate with the TCR and define T-cell identity. Detection of CD3 epsilon allows direct visualization of T lymphocytes within tumor stroma, invasive margins, and intratumoral compartments, providing spatial insight into immune engagement within cancer tissues.

As a tumor immune infiltration marker antibody, CD3e antibody reagents enable both qualitative and quantitative assessment of T-cell distribution in tumors. The density and localization of CD3-positive cells are widely used parameters in tumor immunology, reflecting the degree of immune surveillance and the ability of T cells to access tumor cells. Patterns such as immune-excluded, immune-infiltrated, or immune-desert phenotypes can be distinguished based on CD3 staining patterns, providing biologically meaningful context for interpreting tumor-immune interactions.

CD3 epsilon detection is particularly valuable for understanding how T cells interact with tumor cells and surrounding stromal elements. The presence of CD3-positive lymphocytes within tumor nests may indicate active immune engagement, while restriction of CD3-positive cells to stromal regions can reflect barriers to immune infiltration. CD3e Antibody / Tumor Immune Infiltration Marker Antibody supports these analyses by enabling consistent and spatially resolved detection of T cells across tissue sections.

In tissue-based studies, CD3e antibody reagents are widely used to evaluate immune infiltration across a broad range of tumor types, including carcinomas, lymphomas, and solid tumors of epithelial origin. Detection of CD3-positive cells supports investigation of immune composition, tumor-associated inflammation, and immune-mediated tumor control. These analyses are central to understanding tumor biology and immune response dynamics.

Integration of CD3 detection with additional immune markers, such as CD4, CD8, or macrophage-associated markers, allows further characterization of tumor-infiltrating lymphocyte populations. This enables more detailed profiling of immune cell subsets and functional states within the tumor microenvironment.

CD3e Antibody / Tumor Immune Infiltration Marker Antibody provides a robust and spatially informative tool for analyzing T-cell presence in cancer tissues, supporting research focused on tumor immunology, immune surveillance, and microenvironmental interactions.

A full range of CD3e antibody reagents for immunohistochemistry, western blot, and flow cytometry is available on our CD3e Antibody collection page.

Application Notes

Titration of the CD3e Antibody / Tumor Immune Infiltration Marker Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 154-182 from the human protein was used as the immunogen for this CD3e Antibody / Tumor Immune Infiltration Marker Antibody.

Storage

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

Alternate Names

CD3E antibody, CD3 tumor infiltration antibody, CD3 TIL marker antibody, CD3 tumor microenvironment antibody, CD3 immune infiltration marker antibody