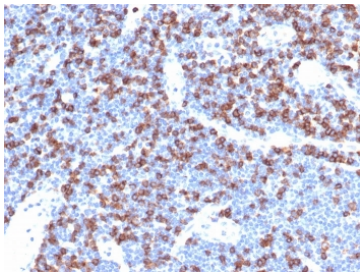
CD8A Antibody / Human Protein Microarray Specificity Validated Antibody [clone CD8/4391R] (V8519)

Catalog No.	Formulation	Size
V8519-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8519-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8519SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

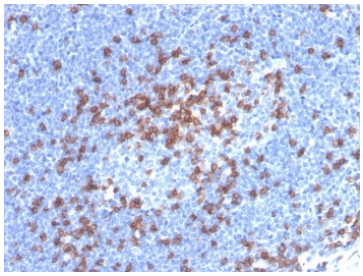
Recombinant RABBIT MONOCLONAL

Bulk quote request

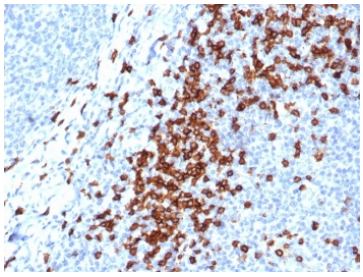
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	CD8/4391R
Purity	Protein A affinity chromatography
UniProt	P01732
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This CD8A Antibody / Human Protein Microarray Specificity Validated Antibody is available for research use only.



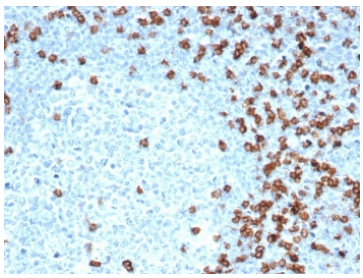
CD8A Antibody Lymph Node IHC. Immunohistochemistry analysis of CD8 alpha (CD8A) in FFPE human lymph node tissue shows strong membranous staining of abundant cytotoxic T lymphocytes within lymphoid regions, consistent with expected localization of CD8-positive T cells in secondary lymphoid tissue and supporting identification of immune cell populations in a densely cellular microenvironment. Human protein microarray specificity validated antibody performance supports high-confidence, target-selective detection in immune-rich tissues (clone CD8/4391R). Heat-induced epitope retrieval was performed in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



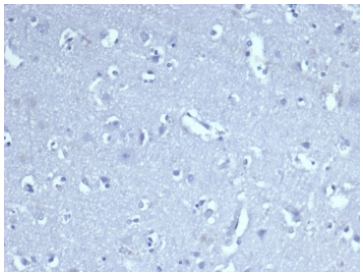
IHC staining of FFPE human lymph node tissue with recombinant CD8A antibody (clone CD8/4391R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



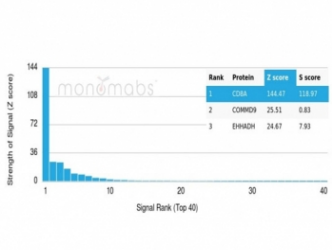
IHC staining of FFPE human tonsil tissue with recombinant CD8A antibody (clone CD8/4391R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



CD8A Antibody Tonsil IHC. Immunohistochemistry analysis of CD8 alpha (CD8A) in FFPE human tonsil tissue shows strong membranous staining of cytotoxic T lymphocytes distributed within lymphoid regions, consistent with expected localization of CD8-positive T cells and supporting identification of immune cell populations in secondary lymphoid tissue. Human protein microarray specificity validated antibody performance supports high-confidence, target-selective detection in immune-rich samples (clone CD8/4391R). Heat-induced epitope retrieval was performed in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



Negative control: IHC staining of FFPE human brain tissue with recombinant CD8A antibody (clone CD8/4391R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



CD8A Antibody Specificity Validation. Human protein microarray specificity analysis of CD8 alpha (CD8A) using a panel of more than 19,000 full-length human proteins demonstrates a dominant top-ranked signal for CD8A with strong separation from lower-ranking proteins, supporting high specificity and minimal off-target binding of the CD8/4391R monoclonal antibody. The signal distribution confirms selective target recognition consistent with specificity-focused validation (clone CD8/4391R). Z-score represents signal strength in standard deviations above the array mean, while S-score reflects the difference between ranked signals and indicates relative target specificity.

Description

Recombinant CD8A antibody detects CD8 alpha, a surface glycoprotein encoded by the CD8A gene. CD8 is expressed on cytotoxic T lymphocytes and a subset of natural killer cells, where it acts as a coreceptor for MHC class I molecules. By stabilizing interactions between T-cell receptors and antigen-MHC complexes, CD8 lowers the threshold for T-cell activation. Because of its central role in cytotoxic immunity, Recombinant CD8A antibody is widely used in immunology, oncology, and infectious disease research.

CD8 alpha forms either homodimers or heterodimers with CD8 beta. Its extracellular immunoglobulin-like domain binds to non-polymorphic regions of MHC class I, while its cytoplasmic tail associates with kinases such as Lck. This arrangement ensures efficient antigen recognition and rapid activation of cytotoxic T cells. CD8 expression defines a major T-cell lineage that is indispensable for immune defense against viral infections and malignant cells.

The Recombinant CD8A antibody clone CD8/4391R provides specific and reproducible detection. Recombinant technology guarantees lot-to-lot consistency, reducing variability across experiments. Clone CD8/4391R has been cited in peer-reviewed studies of T-cell biology, immune surveillance, and tumor immunology. Its versatility supports applications in flow cytometry, immunohistochemistry, and cytotoxicity assays.

Research using clone CD8/4391R has highlighted how CD8+ T cells mediate direct cytotoxic responses through perforin and granzymes, while also producing cytokines that shape broader immune reactions. In oncology, detection of CD8 infiltration into tumor tissue is a strong predictor of prognosis and therapeutic response. In infectious disease, CD8 analysis has provided insight into antiviral immunity and vaccine efficacy. Its reproducibility and specificity make this antibody an essential reagent for immune monitoring.

NSJ Bioreagents provides this Recombinant CD8A antibody to support immunology, oncology, and infectious disease research. Alternate names include CD8 alpha chain antibody, T-cell surface glycoprotein CD8 alpha antibody, MHC class I coreceptor antibody, cytotoxic T-cell marker antibody, and CD8A molecule antibody.

This antibody is part of a broader selection of immune cell marker antibodies designed to support studies of T cell biology, immune infiltration, and tumor immunology, including application-specific CD8A antibody reagents for IHC, FACS, WB, and IF.

Application Notes

Optimal dilution of the CD8A Antibody / Human Protein Microarray Specificity Validated Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 135-235 from the human protein was used as the immunogen for the recombinant CD8A antibody.

Storage

Store the recombinant CD8A antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD8A human protein microarray antibody, CD8 alpha specificity validated antibody, CD8A high specificity antibody, CD8A recombinant rabbit antibody, CD8A validation antibody

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