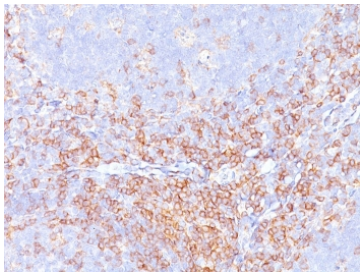
CD4 Antibody / Microarray Specificity Validated Antibody [clone CD4/3619R] (V8518)

Catalog No.	Formulation	Size
V8518-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8518-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8518SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

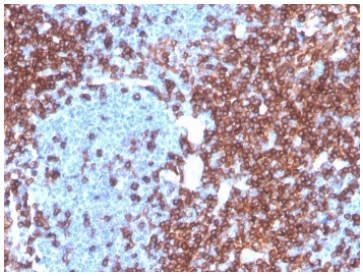
Recombinant RABBIT MONOCLONAL

Bulk quote request

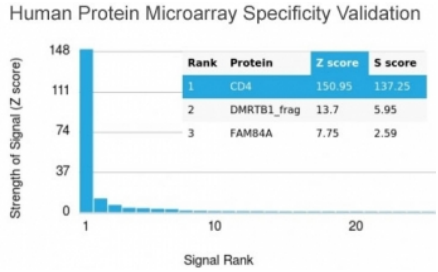
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	CD4/3619R
Purity	Protein A affinity chromatography
UniProt	P01730
RRID	AB_3756576
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This recombinant CD4 antibody is available for research use only.



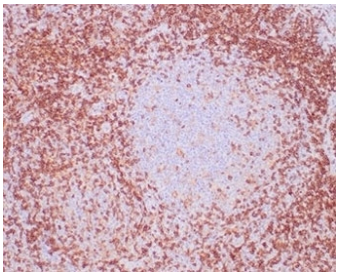
CD4 Antibody for IHC. Analysis of CD4 antibody staining in FFPE human tonsil tissue shows strong membranous labeling of CD4-positive T helper lymphocytes within interfollicular regions and surrounding lymphoid follicles, highlighting T cell-rich zones within lymphoid tissue. The selective staining pattern supports the high specificity profile of this microarray specificity validated clone CD4/3619R. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling before testing.



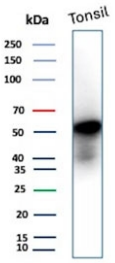
IHC staining of FFPE human lymph node with recombinant microarray validated CD4 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



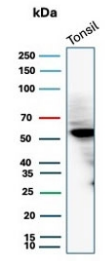
CD4 Antibody Microarray Validation. Analysis of protein microarray specificity testing using a human protein microarray containing thousands of full-length proteins demonstrates that CD4 is the top-ranked target with a markedly elevated signal intensity, indicating strong target enrichment relative to all other proteins on the array. The high Z score and S score reflect both signal strength and clear separation from non-specific interactions, supporting selective target recognition and minimal cross-reactivity of this CD4 antibody across complex protein environments.



IHC staining of FFPE human tonsil tissue with recombinant CD4 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Western blot testing of human tonsil tissue lysate with recombinant CD4 antibody. Expected molecular weight: 50-55 kDa.



Western blot testing of human tonsil tissue lysate with recombinant CD4 antibody. Expected molecular weight: 50-55 kDa.

Description

Recombinant CD4 antibody detects CD4, a surface glycoprotein encoded by the CD4 gene. CD4 is expressed on helper T cells, monocytes, macrophages, and dendritic cells, where it functions as a coreceptor for MHC class II-mediated antigen recognition. Because CD4 is critical for T-cell activation and is also the primary receptor for HIV, Recombinant CD4 antibody is indispensable in immunology, oncology, and infectious disease research.

CD4 is a type I transmembrane protein with four extracellular immunoglobulin-like domains, a transmembrane segment, and a cytoplasmic tail containing signaling motifs. By associating with the tyrosine kinase Lck, CD4 stabilizes TCR-MHC

interactions and enhances signaling. This costimulatory role supports proliferation, differentiation, and cytokine secretion. Its restricted expression on helper T-cell subsets makes CD4 an important marker for immune monitoring.

The Recombinant CD4 antibody clone CD4/3619R provides reliable and consistent detection. Recombinant technology ensures uniform performance across lots, minimizing variability. Clone CD4/3619R has been referenced in peer-reviewed publications exploring T-cell activation, tumor immunology, and HIV pathogenesis. Its versatility supports flow cytometry, immunohistochemistry, and in vitro functional assays where precise CD4 detection is needed.

Research using clone CD4/3619R has shown how CD4 defines helper T-cell subsets in both health and disease. In oncology, detection supports studies of tumor-infiltrating lymphocytes and anti-tumor immunity. In infectious disease, this antibody has clarified how CD4 serves as the entry receptor for HIV, providing insight into viral pathogenesis and vaccine development. Beyond pathology, CD4 detection is central to studies of immune regulation and tolerance.

NSJ Bioreagents supplies this Recombinant CD4 antibody to support immunology, oncology, and infectious disease research. Alternate designations include T-cell surface glycoprotein CD4 antibody, helper T-cell marker antibody, L3T4 antigen antibody, MHC class II coreceptor antibody, HIV receptor antibody, and CD4 molecule antibody.

A full range of CD4 antibody reagents for immunohistochemistry, western blot, and flow cytometry is available on our CD4 Antibody collection page.

Application Notes

Optimal dilution of the CD4 Antibody / Microarray Specificity Validated Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 216-396 from the human protein was used as the immunogen for the CD4 Antibody / Microarray Specificity Validated Antibody.

Storage

Store the recombinant CD4 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD4 microarray validated antibody, CD4 specificity validated antibody, CD4 HuProt antibody, CD4 high specificity antibody

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