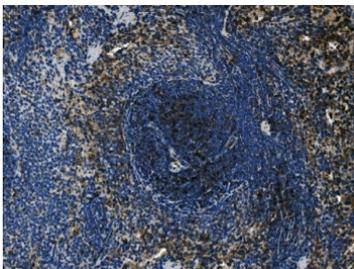


CD4 Antibody for IHC / Rodent Lymphoid Tissue Marker Antibody (RQ6834)

Catalog No.	Formulation	Size
RQ6834	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P05540
Applications	Immunohistochemistry (FFPE) : 2-5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This CD4 antibody is available for research use only.



CD4 Antibody for IHC. Immunohistochemistry analysis of CD4 antibody in rat spleen tissue. Formalin-fixed, paraffin-embedded rat spleen shows membranous staining of CD4-positive T helper lymphocytes predominantly localized within the periarteriolar lymphoid sheath (PALS) of the white pulp, with surrounding B cell follicle regions remaining comparatively negative, highlighting compartmentalized immune architecture. Heat-induced epitope retrieval was performed using pH 8 EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.

Description

CD4 molecule (CD4) is a cell surface glycoprotein expressed primarily on T helper lymphocytes, with additional expression on subsets of monocytes, macrophages, and dendritic cells, where it functions as a co-receptor for antigen recognition through interaction with major histocompatibility complex class II molecules. CD4 Antibody for IHC is specifically used in immunohistochemistry to detect CD4-positive immune cells within formalin-fixed tissue sections, enabling visualization of T lymphocyte distribution within intact rodent lymphoid tissue architecture.

CD4 antibody, also known as T helper cell marker antibody or CD4 surface receptor antibody, is a key reagent for immunohistochemistry-based analysis of immune cell localization. CD4 Antibody for IHC allows precise identification of CD4-positive T helper lymphocytes within defined tissue compartments, providing spatial context that cannot be obtained from suspension-based assays. In rodent systems, immunohistochemistry staining with CD4 Antibody for IHC enables detailed evaluation of lymphoid organ organization and immune cell compartmentalization.

This CD4 Antibody for IHC is particularly well suited for analysis of rodent spleen, where distinct microanatomical regions define immune function. Immunohistochemistry staining highlights CD4-positive T cells within the periarteriolar lymphoid sheath (PALS), a T cell-rich region of the splenic white pulp that surrounds central arterioles. CD4-positive cells are typically concentrated within these T cell zones, while adjacent B cell follicles remain relatively negative, creating a clear and biologically expected staining pattern that supports interpretation of lymphoid structure and immune organization.

Beyond the PALS, CD4 Antibody for IHC supports evaluation of CD4-positive cell distribution across additional splenic compartments, including the marginal zone and red pulp, where immune cell trafficking and antigen exposure occur. This enables researchers to assess how CD4-positive lymphocytes are positioned relative to vascular structures, antigen-presenting cells, and other immune populations. CD4 Antibody for IHC therefore provides a powerful tool for studying immune cell localization, migration, and compartmental dynamics in rodent lymphoid tissues under both normal and experimental conditions.

CD4 is localized to the plasma membrane of immune cells, and in immunohistochemistry, CD4 Antibody for IHC produces a distinct membranous staining pattern that allows clear visualization of individual lymphocytes within complex tissue environments. This staining pattern enables accurate identification of CD4-positive cells within densely cellular regions and supports differentiation of T helper cells from surrounding stromal and parenchymal elements. A CD4 antibody can be used in immunohistochemistry to support detection of CD4-expressing immune cells in rodent tissues, enabling detailed analysis of lymphoid architecture, immune compartmentalization, and tissue-resident T cell populations.

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 for IHC / Rodent Lymphoid Tissue Marker Antibody should be determined by the researcher.

Immunogen

Recombinant rat protein (amino acids K28-A246) was used as the immunogen for the CD4 Antibody for IHC / Rodent Lymphoid Tissue Marker Antibody.

Storage

After reconstitution, the CD4 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

Alternate Names

CD4 rodent IHC antibody, CD4 spleen antibody, CD4 lymphoid tissue antibody, CD4 immunohistochemistry antibody

