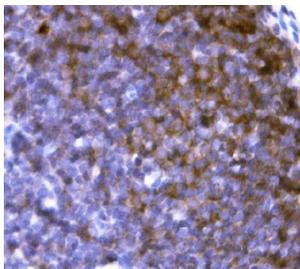


## CD19 Antibody for Rat (RQ7965)

Catalog No.	Formulation	Size
RQ7965	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Rat
<b>Format</b>	Antigen affinity purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	F1LNH2
<b>Applications</b>	Immunohistochemistry (FFPE) : 2-5ug/ml Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	This Cd19 antibody is available for research use only.



IHC staining of FFPE rat lymph node tissue with Cd19 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

### Description

CD19 antibody recognizes CD19, a B cell-specific type I transmembrane glycoprotein that functions as a critical coreceptor in B cell receptor signaling. CD19 Antibody for Rat is developed to detect the rodent ortholog and recognizes rat Cd19 protein expressed on developing and mature B lymphocytes. CD19 is a member of the immunoglobulin superfamily and is localized to the plasma membrane, where it forms a signaling complex with CD21 and CD81 to amplify antigen receptor-mediated signaling. Through this complex, CD19 lowers the activation threshold of B cells and promotes downstream pathways involved in proliferation, differentiation, and survival.

The rat Cd19 gene encodes a protein containing two extracellular immunoglobulin-like domains, a single transmembrane region, and a cytoplasmic tail enriched in tyrosine residues that become phosphorylated following B cell activation. These phosphorylation events recruit signaling molecules such as PI3K, contributing to regulation of humoral immune responses. CD19 Antibody for Rat supports studies of normal B cell development in rat models, including investigations of bone marrow maturation, peripheral B cell maintenance, and antigen-driven activation.

In rat tissues, Cd19 expression is restricted to B lineage cells within bone marrow, spleen, lymph node, and other secondary lymphoid organs. Terminally differentiated plasma cells often exhibit reduced Cd19 expression, reflecting late-stage B cell maturation. Because of this lineage specificity, CD19 Antibody for Rat serves as a reliable marker for identifying B cells in immunologic and translational research using rat systems.

Altered Cd19 expression and B cell signaling dysregulation have been implicated in autoimmune disease models and experimental lymphoma studies in rodents. Accurate detection of rat Cd19 protein is therefore important for evaluating immune responses, studying B cell-driven pathology, and assessing therapeutic interventions in preclinical models. CD19 Antibody for Rat provides targeted recognition of the rat Cd19 antigen and facilitates analysis of B cell distribution and activation states.

By specifically recognizing rat Cd19 protein, this antibody offers a dependable reagent for researchers working with rat immune tissues and disease models. Its use enables detailed examination of B cell biology, immune regulation, and experimental immunotherapy approaches in rat-based studies.

## Application Notes

Optimal dilution of the Cd19 antibody should be determined by the researcher.

## Immunogen

E. coli-derived recombinant rat protein (amino acids D89-L420) was used as the immunogen for the Cd19 antibody.

## Storage

After reconstitution, the Cd19 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.