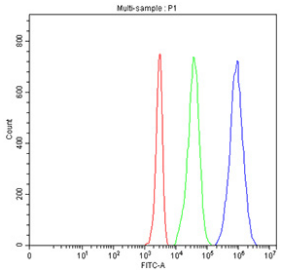
CD5 Antibody for FACS / CD5 Flow Cytometry Antibody (RQ4443)

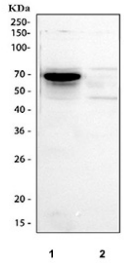
Catalog No.	Formulation	Size
RQ4443	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

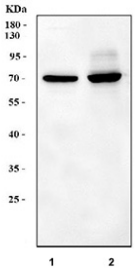
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P06127
Localization	Cell membrane
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Direct ELISA : 0.1-0.5ug/ml (human recombinant protein) Flow Cytometry : 1-3ug/million cells
Limitations	This CD5 Antibody for FACS / CD5 Flow Cytometry Antibody is available for research use only.



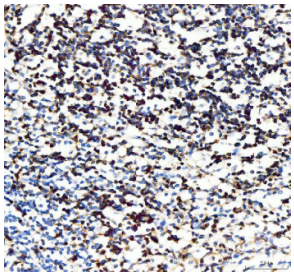
CD5 Antibody for FACS. Flow cytometry analysis of CD5 antibody staining in human Jurkat cells using a CD5 flow cytometry antibody at 1 ug per million cells following blocking with goat sera. The histogram shows a clear rightward shift of the CD5 antibody-stained population (blue) compared to the isotype control (green) and unstained cells (red), indicating strong and specific cell surface detection of CD5. This distinct population separation supports reliable identification of CD5-positive T cells and demonstrates suitability for flow cytometry and fluorescence-activated cell sorting (FACS) applications in immune cell profiling.



Western blot testing of 1) human Jurkat and 2) human HeLa cell lysate with CD5 antibody at 0.5ug/ml. Expected molecular weight: 55-67 kDa depending on glycosylation level.



Western blot testing of 1) rat spleen and 2) mouse spleen tissue lysate with CD5 antibody at 0.5ug/ml. Expected molecular weight: 55-67 kDa depending on glycosylation level.



IHC staining of FFPE human appendix tissue with CD5 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

CD5 (CD5) is a type I transmembrane glycoprotein and member of the scavenger receptor cysteine-rich (SRCR) superfamily, expressed on the cell surface of T lymphocytes and a subset of B cells. CD5 Antibody for FACS / CD5 Flow Cytometry Antibody is optimized for high-resolution detection of CD5 at the single-cell level, enabling precise identification and quantification of lymphocyte populations in flow cytometry and fluorescence-activated cell sorting (FACS) assays. CD5 antibody, also known as T cell surface glycoprotein CD5 antibody or LEU1 antibody, is a core marker in immunophenotyping panels used to define T cell lineage and to identify CD5-positive B cell subsets across normal and disease states.

In flow cytometry, CD5 is one of the most reliable surface markers for distinguishing T cells from other immune populations due to its consistent and high-level expression on mature peripheral T lymphocytes. CD5 antibody staining produces a strong, well-resolved surface signal that allows clear separation of CD5-positive and CD5-negative populations, supporting accurate gating strategies and reproducible analysis. This is particularly important in multiparametric FACS workflows, where CD5 is frequently combined with markers such as CD3, CD4, CD8, CD19, and CD20 to define immune subsets with high precision. The CD5 flow cytometry antibody therefore plays a central role in constructing robust immunophenotyping panels for both research and clinical applications.

Beyond lineage identification, CD5 is functionally important as a regulator of antigen receptor signaling, modulating T cell receptor (TCR) activation thresholds and contributing to immune tolerance. Its expression levels can reflect changes in immune activation and differentiation states, making CD5 antibody for FACS valuable for studying immune dynamics in contexts such as infection, inflammation, and cancer. In B cell populations, CD5 expression is more restricted but highly informative, as it is characteristically present in certain disease-associated subsets including chronic lymphocytic leukemia (CLL) and mantle cell lymphoma. Flow cytometry detection of CD5 in combination with B cell markers enables clear identification of these clinically relevant populations.

CD5 antibody for FACS is particularly powerful in hematologic malignancy analysis, where accurate classification of

lymphocyte populations is critical. The ability to quantitatively assess CD5 expression across thousands of individual cells allows detection of abnormal or clonal populations that may not be apparent in bulk assays. In leukemia and lymphoma workflows, CD5 staining is routinely used to distinguish T cell neoplasms from B cell malignancies and to identify CD5-positive B cell disorders, providing essential diagnostic and research insight.

This rabbit polyclonal CD5 antibody is well suited for flow cytometry applications involving live or fixed cells, delivering consistent cell surface staining with high sensitivity. Its compatibility with multicolor panels supports complex experimental designs aimed at dissecting immune cell heterogeneity. Because flow cytometry enables rapid, quantitative, and multiparametric analysis, the CD5 flow cytometry antibody is an indispensable tool for immune profiling, disease characterization, and monitoring of therapeutic responses in both basic research and translational studies.

A full range of CD5 antibody reagents for immunohistochemistry, western blot, and flow cytometry is available on our CD5 Antibody collection page.

Application Notes

Optimal dilution of the CD5 Antibody for FACS / CD5 Flow Cytometry Antibody should be determined by the researcher.

Immunogen

Human CD5 recombinant protein (amino acids R25-L495) was used as the immunogen for the CD5 antibody.

Storage

After reconstitution, the CD5 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

CD5 FACS antibody, CD5 flow cytometry antibody, CD5 cell surface marker antibody, CD5 lymphocyte marker antibody, CD5 immune profiling antibody