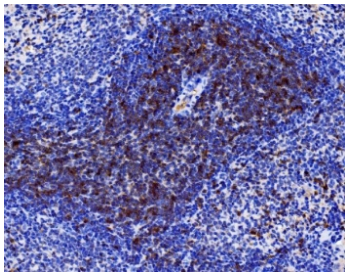
CD27 Antibody for FACS / Cross-Species CD27 Flow Cytometry Antibody (RQ6837)

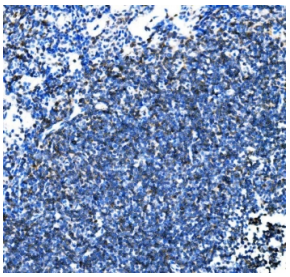
Catalog No.	Formulation	Size
RQ6837	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

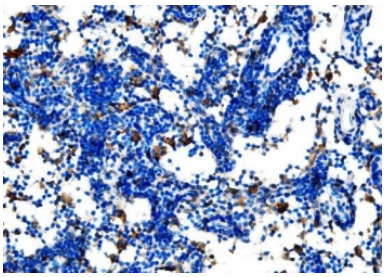
Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P41272
Applications	Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This CD27 Antibody for FACS / Cross-Species CD27 Flow Cytometry Antibody is available for research use only.



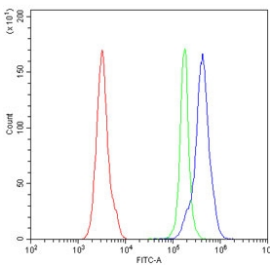
CD27 Antibody Rat Spleen IHC. Immunohistochemistry analysis of CD27 / TNFRSF7 expression in FFPE rat spleen tissue using CD27 Immunohistochemistry Antibody. Strong membranous and cytoplasmic HRP-DAB brown staining is observed in lymphocyte populations within splenic white pulp regions, consistent with CD27 expression on T cells and memory B cells, while surrounding non-lymphoid areas show minimal staining. The staining highlights lymphoid architecture and immune cell localization in spleen tissue. Heat-induced epitope retrieval was performed in pH 8 EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.



CD27 Antibody Rat Lymph Node IHC. Immunohistochemistry analysis of CD27 / TNFRSF7 expression in FFPE rat lymph node tissue using CD27 Immunohistochemistry Antibody. Distinct membranous and cytoplasmic HRP-DAB brown staining is observed in lymphocyte populations within lymph node follicles and paracortical regions, consistent with CD27 expression on activated and memory T and B cells, while surrounding stromal elements remain largely negative. The staining pattern highlights lymphoid organization and immune cell compartmentalization within the node. Heat-induced epitope retrieval was performed in pH 8 EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.



CD27 Antibody Mouse Lymph Node IHC. Immunohistochemistry analysis of CD27 / TNFRSF7 expression in FFPE mouse lymph node tissue using CD27 Immunohistochemistry Antibody. Membranous and cytoplasmic HRP-DAB brown staining is observed in scattered lymphocyte populations within lymph node parenchyma, consistent with CD27 expression on activated and memory T and B cells, while adjacent non-lymphoid structures remain largely unstained. The distribution of positive cells supports identification of immune cell subsets within the lymph node microenvironment. Heat-induced epitope retrieval was performed in pH 8 EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.



CD27 Antibody for FACS. Flow cytometry analysis of CD27 / TNFRSF7 expression in mouse peripheral blood mononuclear cells using Cross-Species CD27 Flow Cytometry Antibody. Cells stained with CD27 antibody (blue) show a clear right-shifted population compared to isotype control (green) and unstained cells (red), indicating cell surface expression of CD27 on lymphocyte populations. The distinct separation supports accurate gating and identification of CD27-positive cells and highlights its utility for PBMC-based immune profiling in flow cytometry.

Description

CD27, also known as TNF receptor superfamily member 7 (TNFRSF7), is a cell surface receptor expressed on T lymphocytes, memory B cells, and subsets of natural killer cells, where it regulates immune activation, survival, and differentiation. CD27 Antibody for FACS / Cross-Species CD27 Flow Cytometry Antibody is uniquely positioned for high-resolution identification of CD27-positive immune populations in suspension-based assays, enabling precise analysis of lymphocyte subsets in peripheral blood mononuclear cells. CD27 antibody reagents are widely used in flow cytometry to define immune cell composition, evaluate activation status, and support quantitative immune profiling across experimental systems.

CD27 antibody, also referred to as TNFRSF7 antibody or CD27 lymphocyte marker antibody in the literature, is particularly well suited for flow cytometry due to its stable and accessible cell surface expression. In PBMC-based assays, CD27 serves as a key discriminator of memory B cells and is frequently used to define differentiation states within both B cell and T cell compartments. Its consistent surface localization enables direct staining without permeabilization, preserving native receptor presentation and supporting streamlined flow cytometry workflows.

CD27 Antibody for FACS / Cross-Species CD27 Flow Cytometry Antibody demonstrates strong performance in mouse PBMC analysis, where it produces clear separation between CD27-positive and CD27-negative populations. This well-defined population resolution is critical for accurate gating strategies, particularly in multiparametric panels where CD27 is combined with additional lineage and activation markers. The ability to generate a distinct right-shifted population relative to controls supports confident identification of CD27-expressing lymphocytes and reduces ambiguity in data interpretation.

Cross-species reactivity in mouse and rat further strengthens the utility of this antibody for preclinical and translational immunology studies. Consistent detection of CD27 across species enables direct comparison of immune cell populations

in different experimental models, supporting studies of immune development, disease progression, and therapeutic response. This is particularly valuable in PBMC-based analyses, where circulating immune cells provide a readily accessible and biologically relevant readout of systemic immune status.

In flow cytometry applications, CD27 is commonly incorporated into panels designed to resolve functional immune subsets, including memory B cells, activated T cells, and antigen-experienced lymphocyte populations. Its expression pattern complements other surface markers, allowing refined classification of immune cells and enabling deeper insight into immune system dynamics. The clear on-cell signal generated by CD27 staining supports both qualitative visualization and quantitative population analysis in high-throughput assays.

The rabbit polyclonal antibody format enables recognition of multiple epitopes on the CD27 protein, enhancing signal robustness and improving detection across heterogeneous cell populations. This can be particularly advantageous in PBMC samples where expression levels may vary across subsets or activation states, ensuring reliable detection without loss of sensitivity.

Overall, CD27 Antibody for FACS / Cross-Species CD27 Flow Cytometry Antibody provides strong and reproducible detection of CD27-positive lymphocytes, with clear population separation in PBMC samples that supports precise gating, immune subset identification, and cross-species flow cytometry-based immune profiling.

This antibody is part of a broader CD27 antibody collection designed to support diverse immunological research applications.

Application Notes

Optimal dilution of the CD27 Antibody for FACS / Cross-Species CD27 Flow Cytometry Antibody should be determined by the researcher.

Immunogen

Recombinant mouse protein (amino acids P24-F187) was used as the immunogen for the CD27 antibody.

Storage

After reconstitution, the CD27 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

TNFRSF7 antibody, CD27 flow cytometry antibody, CD27 PBMC marker antibody, CD27 lymphocyte surface marker antibody, CD27 immune profiling antibody

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