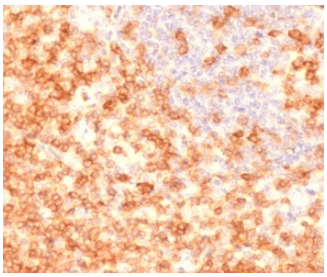
CD27 Antibody / Memory B Cell Marker Antibody [clone CDLA27-1R] (V3676)

Catalog No.	Formulation	Size
V3676-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3676-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3676SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3676IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

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, kappa
Clone Name	CDLA27-1R
Purity	Protein A affinity chromatography
UniProt	P26842
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT Prediluted IHC Only Format : incubate for 30 min at RT (1)
Limitations	This CD27 Antibody / Memory B Cell Marker Antibody is available for research use only.



CD27 Antibody for IHC Tonsil Staining. Immunohistochemistry analysis of CD27 / TNFRSF7 expression in FFPE human tonsil tissue using CD27 Antibody / Memory B Cell Marker Antibody clone CDLA27-1R. Strong membranous HRP-DAB brown staining is observed in lymphocyte populations within germinal centers and surrounding mantle zones, consistent with CD27 expression on memory B cells and antigen-experienced lymphocytes, while adjacent stromal and epithelial elements remain largely negative. The staining pattern highlights memory B cell compartments and supports evaluation of humoral immune architecture within tonsillar tissue. Heat-induced epitope retrieval was performed in 10 mM Tris buffer with 1 mM EDTA, pH 9, for 10-20 minutes followed by cooling prior to antibody incubation.

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 contributes to immune activation and differentiation. CD27 Antibody / Memory B Cell Marker Antibody (clone CDLA24-1R) is uniquely positioned for identifying and characterizing memory B cell populations, enabling clear discrimination between naive and antigen-experienced B cells in both tissue and suspension-based assays. CD27 antibody reagents are widely used in studies of humoral immunity to define B cell subsets and evaluate long-term immune memory.

CD27 antibody, also referred to as TNFRSF7 antibody or CD27 memory B cell antibody in the literature, is one of the most well-established markers of memory B cells. Expression of CD27 reflects prior antigen exposure and functional maturation, distinguishing memory B cells from naive B cell populations that lack CD27 expression. This makes CD27 a critical marker for investigating adaptive immune responses and for assessing the persistence of immunological memory following infection or vaccination.

CD27 Antibody / Memory B Cell Marker Antibody (clone CDLA24-1R) is particularly valuable for analyzing B cell differentiation states within lymphoid tissues and circulating immune compartments. In tissues such as tonsil and spleen, CD27-positive B cells are enriched within germinal center-associated regions and memory compartments, where they contribute to antibody production and immune recall responses. Detection of CD27 in these contexts supports detailed analysis of B cell maturation and functional specialization.

In PBMC-based assays and flow cytometry applications, CD27 is frequently used in combination with additional markers to resolve B cell subsets, including naive, memory, and plasma cell populations. Its expression provides a reliable indicator of antigen-experienced B cells and supports studies focused on immune memory, vaccine response, and immune system dynamics. The ability to accurately identify CD27-positive B cells is essential for understanding humoral immune function and for monitoring immune competence.

Alterations in CD27 expression have been associated with immune dysregulation, including impaired memory B cell formation and abnormal immune responses in disease states. This further underscores the importance of CD27 as a marker for studying B cell biology and immune system health. Antibodies targeting CD27 enable precise detection of memory B cell populations and support investigations into both normal and pathological immune processes.

The recombinant rabbit monoclonal clone CDLA24-1R antibody is designed to provide sensitive and specific detection of CD27, enabling accurate identification of memory B cell populations across experimental systems. Its performance supports reproducible analysis of B cell differentiation and immune memory in both research and translational contexts.

Overall, CD27 Antibody / Memory B Cell Marker Antibody (clone CDLA24-1R) provides reliable detection of CD27 for identifying memory B cells and studying humoral immune responses, supporting detailed investigation of adaptive immunity and long-term immune memory formation.

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

applications.

Application Notes

The stated application concentrations are suggested starting points. Titration of the CD27 Antibody / Memory B Cell Marker Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Human CD27 protein was used as the immunogen for the recombinant CD27 antibody.

Storage

Store the recombinant CD27 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

TNFRSF7 antibody, CD27 memory B cell antibody, CD27 B cell differentiation antibody, CD27 lymphocyte subset marker antibody