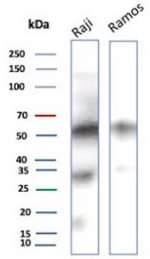
CD27 Antibody / Tumor Immune Microenvironment Marker Antibody [clone LPFS2/8574R] (V4221)

Catalog No.	Formulation	Size
V4221-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4221-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4221SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

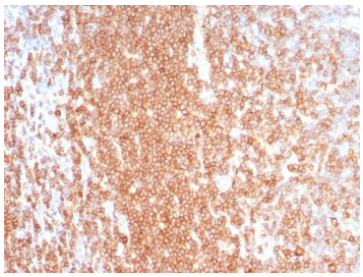
Recombinant RABBIT MONOCLONAL

Bulk quote request

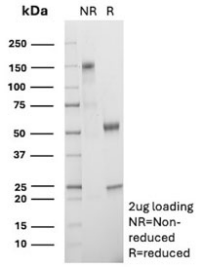
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	LPFS2/8574R
Purity	Protein A/G affinity
UniProt	P26842
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This CD27 Antibody / Tumor Immune Microenvironment Marker Antibody is available for research use only.



CD27 Antibody for WB. Western blot analysis of CD27 / TNFRSF7 expression in human B-cell lymphoma cell lines using CD27 Antibody / Tumor Immune Microenvironment Marker Antibody. Lane 1: Raji cell lysate, Lane 2: Ramos cell lysate. A band is detected at approximately 50â€“60 kDa, consistent with glycosylated CD27, noting a lower predicted molecular weight of approximately 29 kDa for the core protein. Additional lower molecular weight signal may represent unmodified or partially processed forms of CD27. Detection of CD27 in Raji and Ramos cells aligns with expression in B-cell lineage populations relevant to tumor-associated immune environments.



CD27 Antibody for LN IHC. Immunohistochemistry analysis of CD27 / TNFRSF7 expression in FFPE human lymph node tissue using CD27 Antibody / Tumor Immune Microenvironment Marker Antibody clone LPFS2/8574R. Strong membranous HRP-DAB brown staining is observed in dense lymphocyte populations within nodal cortical and paracortical regions, consistent with CD27 expression on activated and antigen-experienced T and B cells, while non-lymphoid stromal elements remain largely negative. The staining pattern highlights immune cell distribution and supports evaluation of lymphocyte-rich microenvironments relevant to tumor-associated immune infiltration. Heat-induced epitope retrieval was performed in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



SDS-PAGE analysis of purified, BSA-free recombinant CD27 antibody (clone LPFS2/8574R) as confirmation of integrity and purity.

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 / Tumor Immune Microenvironment Marker Antibody (clone LPFS2/8574R) is uniquely positioned for evaluating immune cell infiltration within tumor tissues, enabling precise detection of CD27-positive lymphocytes that contribute to the tumor immune microenvironment. CD27 antibody reagents are widely used in cancer immunology to characterize immune contexture, quantify lymphocyte infiltration, and assess spatial relationships between immune cells and tumor cells.

CD27 antibody, also referred to as TNFRSF7 antibody or CD27 tumor infiltrating lymphocyte antibody in the literature, is particularly valuable for identifying activated and antigen-experienced lymphocytes within tumor-associated immune populations. CD27 expression reflects functional immune engagement and is commonly observed in tumor-infiltrating lymphocytes, where it can indicate ongoing immune responses directed against tumor antigens. This makes CD27 a useful marker for studying immune surveillance and the dynamic interplay between tumor cells and the immune system.

CD27 Antibody / Tumor Immune Microenvironment Marker Antibody (clone LPFS2/8574R) enables visualization of CD27-positive immune cells within tumor tissues, supporting analysis of lymphocyte density, localization, and distribution patterns. The presence and organization of CD27-positive lymphocytes within tumor stroma, invasive margins, and intratumoral regions provide insight into immune infiltration patterns and can inform studies of tumor immunogenicity and immune response heterogeneity.

In solid tumors, CD27-positive lymphocytes are often found at tumor margins and within stromal compartments, where they participate in immune cell-tumor interactions. These cells may represent activated T cells or memory B cells engaged in anti-tumor responses. In lymphoid malignancies, CD27 expression may be observed in malignant or reactive lymphocyte populations, further supporting its relevance in cancer-related studies. The ability to detect CD27 across these contexts makes it a versatile marker for analyzing tumor-associated immune populations.

Beyond descriptive analysis, CD27 expression within the tumor immune microenvironment has functional implications. The CD27-CD70 signaling axis contributes to T cell activation and survival, influencing the strength and persistence of anti-tumor immune responses. Dysregulation of this pathway can impact immune effectiveness and may contribute to tumor immune evasion, highlighting the importance of accurately assessing CD27 expression in tumor studies.

The recombinant rabbit monoclonal clone LPFS2/8574R antibody is designed to provide consistent and reproducible detection of CD27 in tissue samples, enabling reliable identification of CD27-positive lymphocytes within tumor microenvironments. Its performance supports high-confidence analysis of immune infiltration and facilitates studies focused on tumor-immune interactions and immune response dynamics.

Overall, CD27 Antibody / Tumor Immune Microenvironment Marker Antibody (clone LPFS2/8574R) provides robust detection of CD27 for studying tumor-associated immune cells, supporting detailed investigation of immune infiltration, spatial organization, and functional immune activity within the tumor microenvironment.

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 / Tumor Immune Microenvironment Marker Antibody should be determined by the researcher.

Immunogen

Recombinant human full-length protein was used as the immunogen for the recombinant CD27 antibody.

Storage

Aliquot the recombinant CD27 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

TNFRSF7 antibody, CD27 tumor infiltrating lymphocyte antibody, CD27 tumor immune marker antibody, CD27 immune microenvironment antibody

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