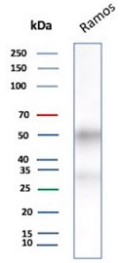
CD27 Antibody / Immune Memory Formation Marker Antibody [clone LPFS2/8607R] (V4234)

Catalog No.	Formulation	Size
V4234-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4234-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4234SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

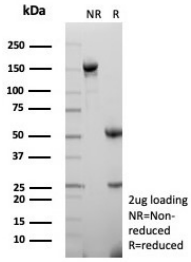
Recombinant RABBIT MONOCLONAL

Bulk quote request

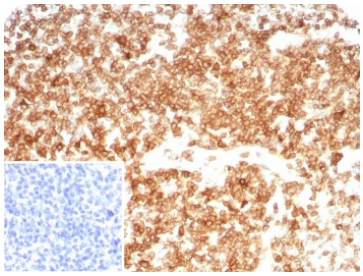
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	LPFS2/8607R
Purity	Protein A/G affinity
UniProt	P26842
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This CD27 Antibody / Immune Memory Formation Marker Antibody is available for research use only.



CD27 Antibody for WB. Western blot analysis of CD27 / TNFRSF7 expression in human Ramos B-cell lysate using CD27 Antibody / Immune Memory Formation Marker Antibody. Lane 1: 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. CD27 is a glycosylated receptor, and the higher apparent molecular weight reflects N-linked glycosylation commonly observed in antigen-experienced lymphocyte populations. The detection of CD27 in Ramos cells aligns with its expression in B-cell lineage populations relevant to immune memory formation.



SDS-PAGE analysis of purified, BSA-free recombinant CD27 antibody (clone LPFS2/8607R) as confirmation of integrity and purity.



CD27 Antibody for IHC. Immunohistochemistry analysis of CD27 / TNFRSF7 expression in FFPE human tonsil tissue using CD27 Antibody / Immune Memory Formation Marker Antibody clone LPFS2/8607R. Strong membranous HRP-DAB brown staining is observed in lymphocyte populations within germinal centers and interfollicular regions, consistent with CD27 expression on memory T cells and memory B cells, while surrounding stromal elements remain largely negative. The staining pattern highlights immune memory compartments and supports evaluation of antigen-experienced lymphocyte populations within tonsillar tissue. Inset: PBS used in place of primary Ab (secondary Ab negative control). 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.

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 plays a central role in regulating immune activation and the formation of long-lived immune memory. CD27 Antibody / Immune Memory Formation Marker Antibody (clone LPFS2/8607R) is uniquely positioned for studying the development and persistence of immune memory, enabling detection of CD27 as a key regulator of antigen-experienced lymphocyte survival. CD27 antibody reagents are widely used in immunology research to investigate adaptive immune responses and long-term immune protection.

CD27 antibody, also referred to as TNFRSF7 antibody or CD27 immune memory antibody in the literature, functions through interaction with its ligand CD70 to promote expansion, survival, and stabilization of antigen-experienced lymphocytes. This signaling pathway is essential for the transition of activated T cells and B cells into long-lived memory populations capable of rapid recall responses. CD27 expression therefore reflects not only prior antigen exposure but also the establishment and maintenance of functional immune memory.

CD27 Antibody / Immune Memory Formation Marker Antibody (clone LPFS2/8607R) is particularly valuable for identifying lymphocyte populations involved in immune memory formation across both cellular and humoral immune compartments. In T cells, CD27 contributes to the generation and persistence of memory subsets that retain the capacity for rapid effector responses. In B cells, CD27 expression marks memory populations that have undergone antigen-driven maturation and are primed for antibody production upon re-exposure.

In lymphoid tissues such as tonsil, spleen, and lymph node, CD27 expression is enriched in regions containing antigen-experienced lymphocytes, including germinal center-associated areas and memory compartments. This spatial distribution reflects the biological role of CD27 in sustaining immune memory and supports its use as a marker for analyzing tissue-level organization of adaptive immune responses. Detection of CD27 in these contexts enables detailed evaluation of how immune memory is established and maintained within organized lymphoid structures.

In circulating immune cells, CD27-positive populations represent memory lymphocytes capable of rapid response upon antigen re-encounter, making CD27 an important marker for evaluating immune competence in studies of infection, vaccination, and immune recovery. Its expression profile supports longitudinal analysis of immune memory dynamics and provides insight into the durability of adaptive immune responses.

The recombinant rabbit monoclonal clone LPFS2/8607R antibody is designed to provide consistent and reproducible detection of CD27, supporting reliable identification of memory-associated lymphocyte populations across experimental systems. Its performance enables clear detection of CD27-positive cells and facilitates studies focused on immune memory formation and persistence.

Overall, CD27 Antibody / Immune Memory Formation Marker Antibody (clone LPFS2/8607R) provides robust detection of CD27 for studies focused on immune memory formation, lymphocyte persistence, and adaptive immune response durability, supporting detailed investigation of long-term immune protection mechanisms.

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

Application Notes

Optimal dilution of the recombinant CD27 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 CD27 Antibody / Immune Memory Formation Marker Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

TNFRSF7 antibody, CD27 immune memory antibody, CD27 memory formation marker antibody, CD27 adaptive immunity antibody