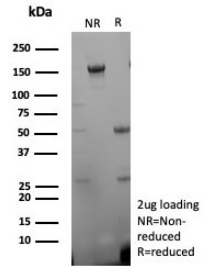
CD27 Antibody Recombinant Mouse Monoclonal [clone rLPFS2/8836] (V4227)

Catalog No.	Formulation	Size
V4227-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4227-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4227SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant | MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rLPFS2/8836
Purity	Protein A/G affinity
UniProt	P26842
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This CD27 antibody is available for research use only.



SDS-PAGE analysis of purified, BSA-free CD27 antibody (clone rLPFS2/8836) as confirmation of integrity and purity.

Description

CD27 antibody recognizes CD27, a type I transmembrane glycoprotein and member of the tumor necrosis factor receptor

superfamily encoded by the CD27 gene. CD27 is localized to the plasma membrane of T lymphocytes, memory B cells, and subsets of natural killer cells, where it functions as a co-stimulatory receptor that enhances lymphocyte activation, proliferation, and survival. CD27 Antibody Recombinant Mouse Monoclonal is developed to support research into adaptive immunity, lymphocyte differentiation, and immune signaling pathways.

The CD27 gene is located on chromosome 12p13 and encodes a protein containing extracellular cysteine-rich domains characteristic of TNF receptor family members, a single transmembrane region, and a cytoplasmic tail that recruits TRAF adaptor proteins. Engagement of CD27 by its ligand CD70 activates downstream signaling pathways including NF-kappaB, promoting T-cell expansion, memory formation, and B-cell maturation. CD27 expression is tightly regulated during immune responses and is widely used as a marker to distinguish naive, central memory, and effector lymphocyte subsets.

In secondary lymphoid tissues such as tonsil and lymph node, CD27-positive cells are observed in T-cell rich paracortical regions and among memory B-cell populations associated with germinal center reactions. CD27 is broadly expressed on naive and central memory T cells and on memory B cells, whereas terminally differentiated effector cells may display reduced expression. Dysregulation of CD27 signaling has been associated with chronic infection, autoimmune disorders, and certain lymphoid malignancies. CD27 Antibody Recombinant Mouse Monoclonal enables evaluation of CD27 distribution and expression levels in normal and pathological immune contexts.

The CD27-CD70 axis is also an active area of investigation in immuno-oncology, as modulation of co-stimulatory signaling can influence anti-tumor immune responses. Assessment of CD27 expression in tumor-infiltrating lymphocytes provides insight into immune activation status and microenvironment composition. Clone rLPFS2/8836 is engineered as a recombinant mouse monoclonal antibody to provide consistent specificity and reproducibility in CD27 detection.

By targeting a central regulator of lymphocyte activation, CD27 Antibody Recombinant Mouse Monoclonal serves as a dependable reagent for studies of T-cell and B-cell biology, immune regulation, and translational immunotherapy research.

Application Notes

Optimal dilution of the CD27 antibody should be determined by the researcher.

Immunogen

A recombinant human CD27 protein fragment (within amino acids 28-170) was used as the immunogen for the CD27 antibody.

Storage

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