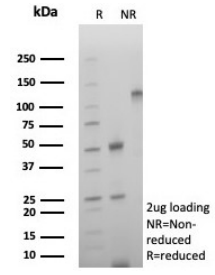
CD39 Antibody [clone rCD39/8682] (V4117)

Catalog No.	Formulation	Size
V4117-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4117-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4117SAF-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	rCD39/8682
Purity	Protein A/G affinity
UniProt	P49961
Localization	Cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This CD39 antibody is available for research use only.



SDS-PAGE analysis of purified, BSA-free CD39 antibody (clone rCD39/8682) as confirmation of integrity and purity.

Description

CD39 antibody is an essential reagent for studying vascular biology, thrombosis, and endothelial regulation. The encoded protein, CD39, is an ectoenzyme responsible for hydrolyzing extracellular nucleotides, thereby modulating vascular tone

and platelet activation. By converting ATP and ADP into AMP, CD39 serves as a natural inhibitor of thrombosis and maintains vascular integrity.

In endothelial cells, CD39 is highly expressed and functions as a protective factor against uncontrolled clot formation. Its activity prevents platelet aggregation by eliminating platelet-stimulating nucleotides from the circulation. This protective role extends to microcirculatory function, where CD39 maintains fluid flow and prevents ischemic damage. Reduced expression or impaired activity of CD39 has been associated with vascular diseases including atherosclerosis, myocardial infarction, and stroke.

Beyond vascular protection, CD39 also contributes to inflammatory regulation. In conditions such as sepsis or ischemia-reperfusion injury, CD39 expression is rapidly upregulated to limit tissue damage caused by excessive ATP signaling. These functions demonstrate how CD39 integrates vascular health with immune control, linking purinergic metabolism to tissue repair.

At the structural level, CD39 contains two transmembrane domains and large extracellular loops with apyrase motifs essential for nucleotide hydrolysis. Its function requires divalent cations and is sensitive to substrate concentration, allowing fine-tuned control of vascular responses. By coupling with CD73, CD39 provides a complete enzymatic pathway for adenosine production, a critical mediator of vasodilation and tissue protection.

The CD39 antibody is widely used in western blotting, immunohistochemistry, immunofluorescence, and flow cytometry to measure protein expression in endothelial cells and vascular tissues. These applications are vital for studies of cardiovascular disease, clotting disorders, and vascular inflammation. For investigators researching blood vessel biology, thrombosis, or therapeutic targets in cardiovascular health, the CD39 antibody offers a robust and specific detection tool. NSJ Bioreagents provides validated antibodies that deliver reproducibility and precision in advanced vascular research.

Application Notes

Optimal dilution of the CD39 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human CD39 protein was used as the immunogen for the CD39 antibody.

Storage

Aliquot the CD39 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.