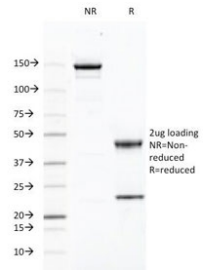
CD46 Antibody 169-1-E4.3 / Mouse Monoclonal [clone 169-1-E4.3] (V2700)

Catalog No.	Formulation	Size
V2700-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2700-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2700SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Citations (9)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	169-1-E4.3
Purity	Protein G affinity chromatography
UniProt	P15529
Localization	Cell surface
Applications	Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-2ug/ml
Limitations	This CD46 Antibody 169-1-E4.3 is available for research use only.



SDS-PAGE Analysis of Purified, BSA-Free CD46 Antibody (clone 169-1-E4.3). Confirmation of Integrity and Purity of the Antibody.

Description

CD46 Antibody 169-1-E4.3 is a mouse monoclonal antibody directed against CD46, also known as membrane cofactor protein (MCP), a widely expressed complement regulatory glycoprotein that protects host cells from complement-mediated damage. CD46 functions as a cofactor for complement factor I, promoting cleavage and inactivation of the complement components C3b and C4b deposited on cell surfaces. This activity helps prevent inappropriate complement activation on healthy tissues while maintaining effective innate immune defense against pathogens. Because CD46 is expressed on nearly all nucleated human cells, it plays an essential role in preserving tissue integrity during normal immune surveillance.

In addition to regulating complement activation, CD46 participates in adaptive immune responses by influencing T cell activation, differentiation, cytokine production, and immune homeostasis. Multiple alternatively spliced cytoplasmic tail isoforms allow CD46 to activate distinct intracellular signaling pathways involved in inflammation, metabolism, and cellular responses to environmental stress. CD46 has also been identified as a receptor for several human pathogens, including measles virus, human herpesvirus 6, adenoviruses, and selected bacterial species, making it an important target in infectious disease research.

Altered CD46 expression has been associated with atypical hemolytic uremic syndrome, autoimmune disorders, transplant biology, and numerous malignancies. Many cancers overexpress CD46, where it may contribute to immune evasion and has become an attractive target for antibody-based therapeutics, antibody-drug conjugates, and oncolytic viral strategies. Consequently, CD46 continues to be extensively investigated in immunology, oncology, and translational medicine.

The 169-1-E4.3 clone has been cited in numerous peer-reviewed publications, demonstrating its utility for research involving CD46 expression and membrane cofactor protein biology.

For additional information on CD46 and its role in complement regulation, visit our CD46 Antibody / Membrane Cofactor Protein Antibody page.

Application Notes

Optimal dilution of the CD46 Antibody 169-1-E4.3 should be determined by the researcher.

Immunogen

Stimulated human leukocytes were used as the immunogen for the CD46 Antibody 169-1-E4.3.

Storage

Store the CD46 Antibody 169-1-E4.3 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD46 antibody, Membrane Cofactor Protein antibody, MCP antibody, Cluster of Differentiation 46 antibody

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