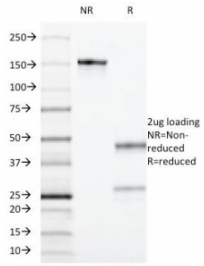
CD55 Antibody / DAF [clone F4-29D9] (V2474)

Catalog No.	Formulation	Size
V2474-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2474-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2474SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Citations (1)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	F4-29D9
Purity	Protein G affinity chromatography
UniProt	P08174
Localization	Cell surface
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml
Limitations	This CD55 antibody is available for research use only.



SDS-PAGE Analysis of Purified, BSA-Free CD55 Antibody (clone F4-29D9). Confirmation of Integrity and Purity of the Antibody.

Description

CD55 antibody clone F4-29D9 is a monoclonal antibody directed against CD55, also known as Decay-accelerating factor or DAF, a glycosylphosphatidylinositol-anchored membrane protein that regulates complement activation. CD55 functions by accelerating the decay of C3 and C5 convertases, protecting host cells from complement-mediated lysis. CD55 is expressed on many cell types, including erythrocytes, leukocytes, epithelial cells, and endothelial cells, highlighting its importance in immune regulation and host defense. NSJ Bioreagents provides CD55 antibody clone F4-29D9 for use in immunology, hematology, and cancer research.

CD55 antibody clone F4-29D9 produces strong membranous staining across a range of tissues. In immunology, this antibody is applied to study the regulation of complement pathways and host protection against autoimmunity. Researchers use it to explore how CD55 expression prevents complement-mediated damage in both healthy cells and disease states.

In hematology, CD55 antibody clone F4-29D9 has been used to investigate paroxysmal nocturnal hemoglobinuria, a disorder characterized by mutations that impair expression of GPI-anchored proteins such as CD55. Detection with this antibody helps clarify how loss of CD55 contributes to complement-mediated lysis of erythrocytes in this disease.

In oncology, CD55 antibody clone F4-29D9 is used to study the role of CD55 in tumor immune evasion. Many tumor cells upregulate CD55 to resist complement-mediated attack, and detection of CD55 with this antibody supports investigations into immune escape mechanisms. Research into therapeutic strategies has explored how targeting CD55 may improve anti-tumor immune responses.

This antibody has also been applied to transplantation studies, where regulation of complement activation by CD55 is important for graft survival. Its detection provides insight into how complement control proteins shape outcomes in both solid organ and hematopoietic transplants.

Validated for tissue-based and cell-based studies, CD55 antibody clone F4-29D9 provides reproducible and specific membranous staining. Alternate names include decay-accelerating factor antibody, complement regulatory protein antibody, and GPI-anchored CD55 antibody.

Application Notes

Optimal dilution of the CD55 antibody should be determined by the researcher.

Immunogen

Human umbilical vein endothelial cells (HUVEC) were used as the immunogen for the CD55 antibody.

Storage

Store the CD55 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).