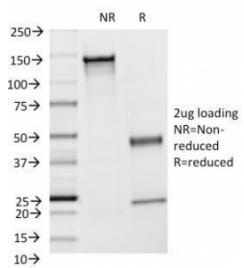
ICAM1 Antibody F4-31C2 / Leukocyte Adhesion Antibody [clone F4-31C2] (V2605)

Catalog No.	Formulation	Size
V2605-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2605-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2605SAF-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 IgG2a, kappa
Clone Name	F4-31C2
Purity	Protein G affinity chromatography
UniProt	P05362
Localization	Cell surface
Applications	Functional studies (order BSA/sodium azide-free format) Flow cytometry: 0.5-1ug/10^6 cells Immunofluorescence: 0.5-1ug/ml
Limitations	This ICAM1 Antibody F4-31C2 / Leukocyte Adhesion Antibody is available for research use only.



Purified ICAM1 Antibody F4-31C2 SDS-PAGE. SDS-PAGE analysis of 2 ug purified ICAM1 Antibody clone F4-31C2 under non-reduced (NR) and reduced (R) conditions demonstrates the integrity of the mouse monoclonal antibody preparation. The non-reduced antibody migrates predominantly near 150 kDa, while reduction produces the expected immunoglobulin heavy- and light-chain bands near 50 kDa and 25 kDa, respectively. This Leukocyte Adhesion Antibody is a mouse IgG2a kappa monoclonal directed against ICAM1/CD54.

Description

ICAM1 Antibody F4-31C2 / Leukocyte Adhesion Antibody recognizes intercellular adhesion molecule 1 (ICAM1), a cell-surface glycoprotein and member of the immunoglobulin superfamily. Also known as ICAM-1 and CD54, ICAM1 contains five extracellular immunoglobulin-like domains, a transmembrane region, and a cytoplasmic domain. It functions as an adhesion molecule that facilitates interactions between leukocytes, endothelial cells, and other cell types involved in immune surveillance and inflammatory responses.

ICAM1 is an important ligand for LFA-1, the CD11a/CD18 integrin expressed by leukocytes. Binding of ICAM1 to LFA-1 promotes firm cellular adhesion and contributes to leukocyte migration across vascular endothelium. ICAM1 also interacts with Mac-1, composed of CD11b and CD18. These adhesive interactions contribute to immune-cell recruitment and help stabilize contacts between lymphocytes and antigen-presenting cells during immune responses.

ICAM1 expression is regulated by inflammatory signals and can increase substantially in response to cytokines and other cellular stimuli. Increased surface expression enhances the ability of leukocytes to adhere to endothelial and other cells, making ICAM1 an important component of inflammatory cell recruitment. Its roles in cellular adhesion and immune-cell trafficking have led to extensive investigation of ICAM1 in immunology, vascular biology, inflammation, tissue injury, and cancer.

ICAM1 also serves as a receptor for major-group human rhinoviruses and can interact with additional cellular and microbial ligands. The protein is extensively N-glycosylated, with seven potential N-linked glycosylation sites. Mature ICAM1 consequently exhibits an apparent molecular weight of approximately 85-115 kDa, with variation according to cellular context and glycosylation state. Clone F4-31C2 is a mouse IgG2a kappa monoclonal antibody generated using human umbilical vein endothelial cells as the immunogen.

NSJ Bioreagents offers this Leukocyte Adhesion Antibody for research into ICAM1 biology and cell-cell interactions. An ICAM1 Antibody F4-31C2 provides a clone-differentiated monoclonal reagent for investigating leukocyte adhesion, immune-cell trafficking, inflammatory signaling, and related ICAM1-mediated processes.

For an alternative monoclonal targeting ICAM1/CD54, see our ICAM1 Antibody ICAM1/6319 / Cell Adhesion Molecule Antibody page.

Application Notes

Optimal dilution of the ICAM1 Antibody F4-31C2 / Leukocyte Adhesion Antibody should be determined by the researcher.

Immunogen

Human umbilical cord vein endothelial cells (HUVEC) were used as the immunogen for the ICAM1 Antibody F4-31C2.

Storage

Store the ICAM1 Antibody F4-31C2 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

ICAM1 antibody, ICAM-1 antibody, CD54 antibody, Intercellular adhesion molecule 1 antibody, Leukocyte adhesion antibody, LFA-1 ligand antibody, Major rhinovirus receptor antibody

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