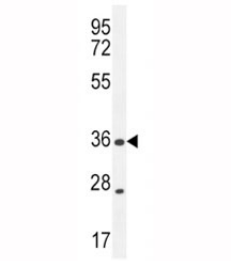
XCR1 Antibody / Lymphotactin Receptor Antibody (F41879)

Catalog No.	Formulation	Size
F41879-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F41879-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P46094
Applications	Western blot: 1:1000
Limitations	This XCR1 Antibody / Lymphotactin Receptor Antibody is available for research use only.



XCR1 Antibody MDA-MB435 Cell WB. Western blot analysis of MDA-MB435 cell lysate using XCR1 Antibody. A distinct immunoreactive band is detected at approximately 36 kDa, consistent with the expected molecular weight of XCR1 following normal electrophoretic migration. These results demonstrate that this XCR1 Antibody, a Lymphotactin Receptor Antibody, specifically detects endogenous XCR1 in human MDA-MB435 cells and is suitable for Western blot analysis.

Description

XCR1 Antibody / Lymphotactin Receptor Antibody recognizes XCR1, also known as the Lymphotactin Receptor, a highly specialized G protein-coupled chemokine receptor that binds the XC chemokines XCL1 and XCL2. Unlike many chemokine receptors that recognize multiple ligands, XCR1 displays remarkable ligand specificity, making it a unique component of the chemokine signaling network. Expression of XCR1 is largely restricted to a specialized subset of conventional dendritic cells that efficiently capture, process, and cross-present extracellular antigens to cytotoxic T lymphocytes. Because of this selective expression pattern, an XCR1 Antibody is widely used to identify cross-presenting dendritic cells and investigate their role in adaptive immunity.

The interaction between lymphotactin and its receptor coordinates communication between dendritic cells, natural killer cells, and activated CD8-positive T cells. XCL1 released by these immune cells recruits XCR1-positive dendritic cells and promotes efficient antigen cross-presentation, ultimately enhancing cytotoxic T-cell activation. This signaling pathway serves as an important bridge between innate and adaptive immunity while contributing to immune surveillance against viral infection and malignant transformation. Consequently, an XCR1 Antibody is frequently employed to study chemokine receptor biology, dendritic cell migration, immune cell communication, and T-cell priming within lymphoid organs and peripheral tissues.

XCR1 has become an important therapeutic target because selective delivery of vaccine antigens to XCR1-positive dendritic cells can enhance antigen-specific cellular immunity. This approach is being actively investigated for cancer immunotherapy, infectious disease vaccines, and strategies designed to improve long-lasting cytotoxic T-cell responses. In addition, XCR1 expression has been examined in autoimmune disease, chronic inflammation, and transplantation, where regulation of dendritic cell function influences immune tolerance and tissue-specific immune responses. An XCR1 Antibody therefore provides an important research tool for understanding both normal immune regulation and disease-associated immune dysfunction.

XCR1 is routinely analyzed using Western blot, immunohistochemistry, immunofluorescence, flow cytometry, and immunoprecipitation to evaluate receptor expression, tissue distribution, and chemokine signaling. These complementary techniques enable researchers to characterize dendritic cell populations, examine immune microenvironments, and investigate receptor-mediated immune activation across diverse experimental systems. NSJ Bioreagents provides carefully validated antibodies to support these applications in basic and translational research. An XCR1 Antibody / Lymphotactin Receptor Antibody is a valuable research reagent for investigating chemokine signaling, dendritic cell biology, antigen cross-presentation, immune surveillance, and the molecular mechanisms that regulate adaptive immune responses.

Visit our XCR1 Antibody / Chemokine XC Receptor 1 Antibody page to explore additional validated antibodies and research tools for investigating XCR1 expression, dendritic cell biology, antigen cross-presentation, and chemokine receptor signaling.

Application Notes

Titration of the XCR1 Antibody / Lymphotactin Receptor Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 305-333 from human Lymphotactin Receptor was used as the immunogen for this XCR1 antibody.

Storage

Aliquot the XCR1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

XCR1 antibody, Lymphotactin Receptor antibody, Chemokine XC Receptor 1 antibody, GPR5 antibody, CCXCR1 antibody

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