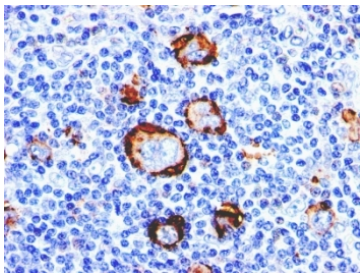
CD15 Antibody / Leukocyte Differentiation Antigen Antibody [clone Leu-M1, also called MMA] (V3177)

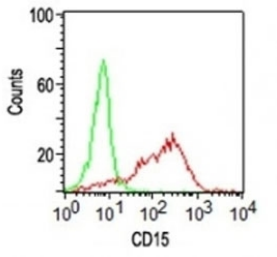
Catalog No.	Formulation	Size
V3177-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3177-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3177SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3177IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

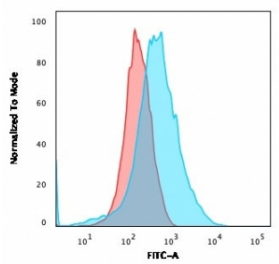
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgM, kappa
Clone Name	Leu-M1, also called MMA
Purity	Precipitated followed by dialysis in 1X PBS
UniProt	P22083
Localization	Cell surface and granular paranuclear
Applications	Flow cytometry: 0.5-1ug/million cells Immunofluorescence: 0.5-1ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This CD15 Antibody / Leukocyte Differentiation Antigen Antibody is available for research use only.



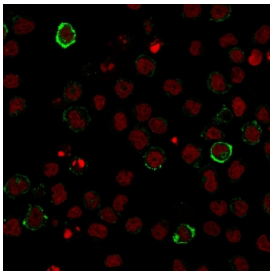
CD15 Antibody Hodgkin's Lymphoma IHC. Immunohistochemistry analysis of FFPE human Hodgkin's lymphoma tissue stained with CD15 Antibody demonstrates strong membranous and cytoplasmic HRP-DAB brown staining within large Reed-Sternberg-like neoplastic cellular populations against a background of reactive inflammatory infiltrates. This leukocyte differentiation antigen antibody highlights CD15 / Lewis X-associated glycosylation patterns characteristic of Hodgkin lymphoma-associated tumor cells and hematopathology-related immune differentiation pathways.



CD15 Antibody Human Monocyte FACS. Flow cytometry analysis of human monocytes stained with CD15 Antibody demonstrates a distinct right-shifted fluorescence population relative to the isotype control, consistent with cell surface expression of CD15 / Lewis X antigen on differentiated leukocyte-associated cellular populations. This leukocyte differentiation antigen antibody supports characterization of myeloid lineage-associated glycosylation pathways and immune cell differentiation status in flow cytometric applications. Red=CD15 antibody, Green=isotype control.



CD15 Antibody U937 FACS. Flow cytometry analysis of human U937 cells stained with CD15 Antibody demonstrates a pronounced right-shifted fluorescence population relative to the isotype control, consistent with cell surface expression of CD15 / Lewis X antigen in myeloid-associated leukemic cells. This leukocyte differentiation antigen antibody supports characterization of myeloid differentiation status and leukocyte-associated glycosylation pathways in hematopoietic cell populations. Blue=CD15 antibody, Red=isotype control.



CD15 Antibody U937 Immunofluorescence. Immunofluorescent analysis of human U937 cells stained with CD15 Antibody demonstrates prominent membranous and cell surface-associated green fluorescence consistent with CD15 / Lewis X antigen expression in myeloid-associated leukemic cellular populations. This leukocyte differentiation antigen antibody highlights immune-associated glycosylation pathways and myeloid lineage differentiation markers within hematopoietic cells. Nuclei are counterstained with Reddot nuclear stain (red).

Description

CD15, also known as Lewis X (Lex), is a carbohydrate adhesion antigen expressed predominantly on granulocytes, subsets of monocytes, and differentiated myeloid-associated cellular populations. CD15 functions in leukocyte adhesion, phagocyte trafficking, inflammatory signaling, and selectin-mediated cell-cell interaction pathways through its role as a fucosylated carbohydrate determinant present on glycoproteins and glycolipids. CD15 Antibody is useful for investigations involving leukocyte differentiation, hematopoietic lineage specification, inflammatory signaling pathways, and hematopathology-associated cellular characterization.

CD15 antibody, also referred to as Lewis X antibody, Leu-M1 antibody, and MMA antibody in the literature, recognizes a carbohydrate epitope generated through fucosyltransferase-associated glycosylation pathways including FUT4-mediated biosynthesis. CD15 expression is strongly associated with mature granulocytes, myeloid differentiation, subsets of activated immune cells, and characteristic Reed-Sternberg cell populations in classical Hodgkin lymphoma. The antigen localizes predominantly to the cell membrane and glycoconjugate-rich cellular surfaces involved in leukocyte adhesion and immune-associated signaling pathways.

CD15 Antibody / Leukocyte Differentiation Antigen Antibody (clone Leu-M1/MMA) is uniquely positioned for studies involving immune differentiation, hematopoietic lineage characterization, and tumor-associated leukocyte marker

expression. This mouse monoclonal antibody has been referenced in more than 1700 publications and supports immunohistochemistry, immunofluorescence, and flow cytometry applications involving granulocytic, myeloid, and Hodgkin lymphoma-associated cellular populations. The extensive literature history associated with clones Leu-M1 and MMA supports broad use in investigations involving hematopathology, leukocyte differentiation, and immune-associated cellular phenotyping.

CD15-associated carbohydrate structures contribute to leukocyte rolling, endothelial adhesion, inflammatory recruitment, and selectin-mediated trafficking pathways during immune activation. Altered CD15 expression patterns have been associated with myeloid maturation status, inflammatory responses, hematologic malignancies, and epithelial tumor-associated glycosylation changes. Because CD15 expression is strongly associated with differentiated granulocytic cellular populations and Reed-Sternberg cells, it has become an important marker in studies involving hematopoietic differentiation and lymphoma-associated immunophenotyping.

In tissue-based detection systems, CD15 expression commonly demonstrates membranous and cytoplasmic staining patterns within granulocytes, inflammatory infiltrates, and Hodgkin lymphoma-associated neoplastic cellular populations. Immunofluorescence and flow cytometry applications additionally support characterization of immune-associated cell surface expression and leukocyte differentiation status in suspension cell populations. The Leu-M1 clone designation is historically well established in hematopathology and lymphoma-associated diagnostic investigations involving Reed-Sternberg cell identification and granulocyte-associated lineage characterization.

This CD15 Antibody supports research involving leukocyte differentiation, hematopoietic lineage biology, inflammatory signaling pathways, granulocyte maturation, Hodgkin lymphoma-associated immunophenotyping, selectin-mediated adhesion biology, and immune-associated glycosylation regulation. Clone Leu-M1/MMA may be incorporated into immunohistochemistry, immunofluorescence, flow cytometry, and tissue-based investigations examining immune differentiation and hematopathology-associated cellular organization in normal and diseased tissues.

For additional hematopoietic differentiation and immune lineage markers, explore our Cancer Antibodies page featuring antibodies targeting leukocyte-associated signaling, hematopathology, and lymphoma differentiation pathways.

Application Notes

The optimal dilution of the CD15 Antibody / Leukocyte Differentiation Antigen Antibody for each application should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

The histiocytic cell line U937 was used as the immunogen for this CD15 antibody.

Storage

Store the CD15 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD15 antibody, Lewis X antibody, Leu-M1 antibody, MMA antibody, FUT4 carbohydrate antigen antibody

Copyright © NSJ Bioreagents. All rights reserved.