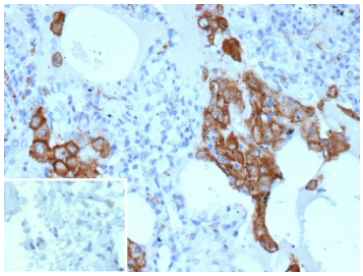
MRC1 Antibody / Macrophage mannose receptor 1 / MRC1L1 [clone MRC1/9454] (V5765)

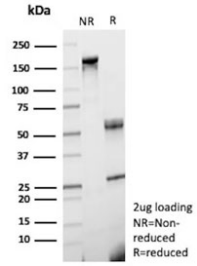
Catalog No.	Formulation	Size
V5765-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5765-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5765SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	MRC1/9454
Purity	Protein A/G affinity
UniProt	P22897
Localization	Cell membrane, cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This MRC1 antibody is available for research use only.



MRC1 Antibody Human Lung IHC. Immunohistochemical staining of FFPE human lung tissue using MRC1 antibody (clone MRC1/9454) demonstrates strong membranous and cytoplasmic HRP-DAB brown staining within scattered pulmonary immune cell populations. The staining pattern is consistent with expression of MRC1 (Macrophage Mannose Receptor 1/CD206), a C-type lectin receptor involved in carbohydrate recognition, receptor-mediated endocytosis, antigen uptake, and macrophage-mediated immune regulation. Positive immunoreactivity is observed in cells morphologically consistent with alveolar macrophages and other antigen-presenting cell populations that contribute to pulmonary immune surveillance and maintenance of respiratory tissue homeostasis. Inset: PBS was used in place of the primary antibody as a negative control. HIER: boil tissue sections in pH 9, 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free MRC1 antibody (clone MRC1/9454) as confirmation of integrity and purity.

Description

MRC1 Antibody / Macrophage Mannose Receptor 1 recognizes MRC1, also known as Macrophage Mannose Receptor 1 or CD206, a type I transmembrane glycoprotein belonging to the C-type lectin receptor family. MRC1 functions as a pattern-recognition and endocytic receptor that binds carbohydrate structures containing mannose, fucose, and N-acetylglucosamine residues commonly found on microorganisms, glycoproteins, and endogenous ligands. Through these interactions, MRC1 mediates receptor-dependent uptake of extracellular material and contributes to immune surveillance, antigen processing, and maintenance of tissue homeostasis.

MRC1 Antibody / Macrophage Mannose Receptor 1 is widely used for the study of macrophage biology and innate immune responses. The receptor is predominantly expressed by macrophages, dendritic cells, and other specialized antigen-presenting cell populations where it facilitates recognition and internalization of pathogens, glycosylated proteins, and cellular debris. Following ligand binding, MRC1 directs cargo into intracellular trafficking pathways that contribute to antigen processing and communication between innate and adaptive immune systems. These functions have established MRC1 as an important marker for investigations involving immune regulation and host defense mechanisms.

MRC1 Antibody / Macrophage Mannose Receptor 1 is also valuable for examining tissue remodeling, wound healing, and inflammatory processes. MRC1-expressing macrophages participate in the clearance of extracellular material, regulation of local immune responses, and maintenance of tissue integrity. The receptor contributes to cellular interactions within the extracellular environment and has been implicated in processes associated with tissue repair, fibrosis, and resolution of inflammation. Consequently, MRC1 has become an important biomarker for studies of macrophage function in both normal physiology and disease states.

MRC1 Antibody / Macrophage Mannose Receptor 1 has gained substantial importance in oncology and tumor microenvironment research. MRC1-positive macrophages are frequently identified within solid tumors where they may contribute to immune suppression, angiogenesis, extracellular matrix remodeling, and tumor progression. As a result, MRC1 is commonly used as a marker for tumor-associated macrophages and is frequently evaluated in studies investigating cancer immunology, therapeutic responses, and interactions between malignant cells and the immune system. Its central role in both immune regulation and tissue remodeling has made MRC1 a valuable target for translational and biomarker research.

MRC1 Antibody / Macrophage Mannose Receptor 1 supports research involving innate immunity, receptor-mediated endocytosis, antigen uptake, carbohydrate recognition, macrophage characterization, and inflammatory signaling pathways. Because MRC1 occupies a critical position at the interface between pathogen recognition and immune regulation, it remains an important target for studies aimed at understanding immune homeostasis, disease-associated inflammation, and host-environment interactions.

Researchers studying macrophage biology, antigen uptake, and innate immune regulation may also be interested in our CD206 Antibody / Macrophage Mannose Receptor Antibody.

Application Notes

Optimal dilution of the MRC1 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 1-200 from human Macrophage mannose receptor 1 protein was used as the immunogen for the MRC1 antibody.

Storage

Aliquot the MRC1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD206 Antibody, MRC1 Antibody, Macrophage Mannose Receptor Antibody, Mannose Receptor Antibody, Macrophage Mannose Receptor 1 Antibody, C-Type Lectin Domain Family 13 Member D Antibody, CLEC13D Antibody, Endocytic Mannose Receptor Antibody

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