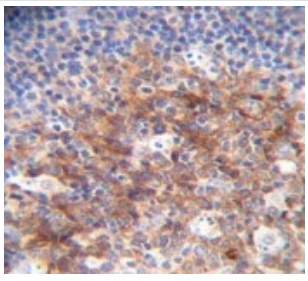
SCARA2 Antibody / Scavenger Receptor Class A Member 2 Antibody (F55070)

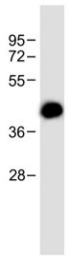
Catalog No.	Formulation	Size
F55070-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F55070-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

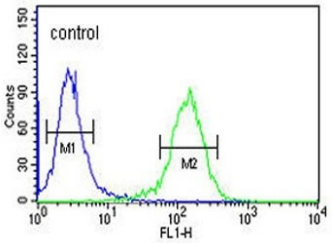
Availability	1-2 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q9UEW3
Localization	Membrane, cytoplasm
Applications	Western blot: 1:250-1:500 Flow cytometry: 1:10-1:50 Immunohistochemisty (FFPE): 1:50-1:100
Limitations	This SCARA2 Antibody / Scavenger Receptor Class A Member 2 Antibody is available for research use only.



SCARA2 Antibody Human Tonsillitis IHC. IHC staining of FFPE human tonsillitis tissue using SCARA2 Antibody. Heat-induced epitope retrieval was performed by steaming sections in citrate buffer (pH 6.0) for 20 minutes, followed by cooling prior to staining. Positive staining is observed in cells within the inflamed tonsillar tissue. SCARA2 Antibody, also called Scavenger Receptor Class A Member 2 Antibody, detects MARCO expression in human tonsillitis tissue, supporting studies of macrophage populations and innate immune responses in inflammatory tissue.



SCARA2 Antibody Human HaCaT Cell WB. Western blot analysis of human HaCaT cell lysate using SCARA2 Antibody. A specific band is detected at approximately 44 kDa. SCARA2/MARCO has predicted molecular weights of approximately 53 kDa and 44 kDa corresponding to two reported isoforms, with the observed band consistent with the smaller isoform. Higher apparent molecular weights may also be observed due to post-translational modification, including glycosylation of MARCO. SCARA2 Antibody, also called Scavenger Receptor Class A Member 2 Antibody, detects MARCO in human cells for studies of scavenger receptor expression and innate immune biology.



SCARA2 Antibody Human K562 Cell FACS. Flow cytometry analysis of fixed and permeabilized human K562 cells using SCARA2 Antibody. The histogram shows cells stained with the antibody (green) compared with the isotype control (blue). A clear fluorescence shift is observed with antibody staining relative to the control, demonstrating detection of SCARA2/MARCO in K562 cells. SCARA2 Antibody, also called Scavenger Receptor Class A Member 2 Antibody, detects MARCO for studies of scavenger receptor expression and innate immune biology.

Description

SCARA2 Antibody / Scavenger Receptor Class A Member 2 Antibody recognizes SCARA2, more commonly known as MARCO (macrophage receptor with collagenous structure), a pattern recognition receptor primarily associated with macrophages and innate immune function. SCARA2 belongs to the class A scavenger receptor family and encodes a type II transmembrane glycoprotein containing a collagen-like extracellular region and a C-terminal scavenger receptor cysteine-rich domain. The receptor binds a diverse range of microbial, cellular and environmental ligands and contributes to recognition and clearance mechanisms used by macrophages during immune surveillance.

SCARA2 is expressed by specialized populations of tissue-resident and activated macrophages. Through its scavenger receptor activity, MARCO can bind bacterial components, modified molecules and particulate material, facilitating their capture and removal by phagocytic cells. These properties have made SCARA2 an important research target for investigating macrophage pattern recognition, phagocytosis, host defense and interactions between innate immune cells and their extracellular environment. A SCARA2 Antibody can also help characterize macrophage populations in tissues where expression of this receptor varies according to cellular state and local signaling conditions.

Expression of Scavenger Receptor Class A Member 2 is influenced by inflammatory and immune stimuli. MARCO-positive macrophages have been investigated in infection, pulmonary inflammation, atherosclerosis and other biological settings involving innate immune activation. Experimental stimulation of macrophage and monocyte-derived cell models can alter MARCO expression, providing a means of examining how inflammatory signals regulate scavenger receptor biology. SCARA2 is therefore relevant to studies connecting macrophage activation with pattern recognition and inflammatory responses.

SCARA2/MARCO has also received substantial attention in cancer immunology because MARCO can be expressed by subsets of tumor-associated macrophages. These macrophage populations are components of the tumor microenvironment and may influence inflammatory signaling, immune regulation and interactions between tumor cells and surrounding stromal and immune cells. Studies of MARCO-positive tumor-associated macrophages have contributed to efforts to understand myeloid cell heterogeneity and the mechanisms through which macrophage populations can influence antitumor immune responses and tumor progression.

SCARA2 provides a useful molecular marker for investigating the intersection of macrophage biology, scavenger receptor function and innate immunity. Its association with specialized macrophage populations also makes the receptor relevant to research on immune cell phenotypes in inflammatory disease and cancer. NSJ Bioreagents supplies antibodies to SCARA2/MARCO and other proteins involved in macrophage and innate immune biology. A SCARA2 Antibody can support research into scavenger receptor activity, macrophage activation, phagocytosis, innate immune responses,

inflammation and tumor-associated macrophages.

For related information on this target, including its role in macrophage biology, innate immunity and scavenger receptor function, see our MARCO Antibody page.

Application Notes

Titration of the SCARA2 Antibody / Scavenger Receptor Class A Member 2 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 13-40 from the human protein was used as the immunogen for this MARCO / SCARA2 antibody.

Storage

Aliquot the MARCO / SCARA2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

SCARA2 antibody, Scavenger receptor class A member 2 antibody, MARCO antibody, Macrophage receptor with collagenous structure antibody, macrophage receptor MARCO antibody

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