10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MARCO Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9891A

Product Information

Application	WB, FC, IHC-P, E
Primary Accession	Q9UEW3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	52658
Antigen Region	13-40

Additional Information

Gene ID	8685
Other Names	Macrophage receptor MARCO, Macrophage receptor with collagenous structure, Scavenger receptor class A member 2, MARCO, SCARA2
Target/Specificity	This MARCO antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-40 amino acids of human MARCO.
Dilution	WB~~1:1000 FC~~1:10~50 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MARCO Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MARCO
Synonyms	SCARA2
Function	Pattern recognition receptor (PRR) which binds Gram-positive and Gram-negative bacteria (PubMed:9468508). Also plays a role in binding of unopsonized particles by alveolar macrophages (By similarity). Binds to the

secretoglobin SCGB3A2 (PubMed:12847263).

Cellular Location Cell membrane; Single-pass type II membrane protein

Tissue Location Expressed in alveolar macrophages (at protein level). Detected in macrophages from various tissues including thymus, kidney, Kupffer cells of liver, and spleen (PubMed:9468508)

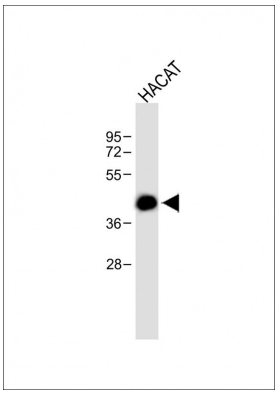
Background

MARCO is a member of the class A scavenger receptor family and is part of the innate antimicrobial immune system. The protein may bind both Gram-negative and Gram-positive bacteria via an extracellular, C-terminal, scavenger receptor cysteine-rich (SRCR) domain. In addition to short cytoplasmic and transmembrane domains, there is an extracellular spacer domain and a long, extracellular collagenous domain. The protein may form a trimeric molecule by the association of the collagenous domains of three identical polypeptide chains.

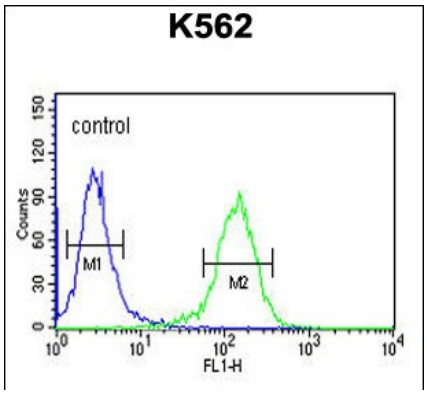
References

Wright, A.K., et al. J. Leukoc. Biol. 86(3):479-489(2009)
Trynka, G., et al. Gut 58(8):1078-1083(2009)
Arredouani, M.S., et al. J. Immunol. 175(9):6058-6064(2005)
Liu, T., et al. J. Proteome Res. 4(6):2070-2080(2005)
Seta, N., et al. Arthritis Rheum. 44(4):931-939(2001)

Images

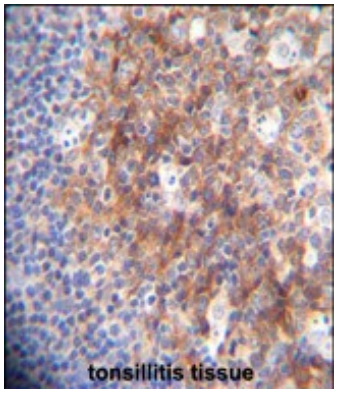


Anti-MARCO Antibody (N-term) at 1:500 dilution + HACAT whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MARCO Antibody (N-term) (Cat. #AP9891a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MARCO Antibody (N-term) (Cat. #AP9891A)immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsillitis tissue



followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MARCO Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- DNA Microarray Analysis of Submandibular Glands in IgG4-Related Disease Indicates a Role for MARCO and Other Innate Immune-Related Proteins.
- Recognition of dextran-superparamagnetic iron oxide nanoparticle conjugates (Feridex) via macrophage scavenger receptor charged domains.