SANTA CRUZ BIOTECHNOLOGY, INC.

MARCO (H-50): sc-68913

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Macrophages provide their host with a nonspecific immune defense against pathogens. One cellular surface receptor utilized by macrophages is the macrophage receptor with collagenous structure (MARCO). MARCO is a member of the class A scavenger receptor molecules. This single-pass type II membrane protein was first identified in subpopulations of murine macrophages in the spleen and medullary cord of lymph nodes. MARCO is additionally found in increased levels in other tissues during bacterial infection. MARCO is a major receptor in alveolar macrophages, binding both Gram-positive and Gram-negative bacteria. Additionally, MARCO has been shown to be the major scavenger receptor involved in silica uptake and cytotoxicity in murine macrophages. In mice, mutations in the gene coding for MARCO may lead to increased pulmonary inflammation and cytokine release as well as an imparied ability to clear bacteria from the lungs.

REFERENCES

1. Grolleau, A., et al. 2003. Inducible expression of macrophage receptor Marco by dendritic cells following phagocytic uptake of dead cells uncovered by oligonucleotide arrays. J. Immunol. 171: 2879-2888.
2. Arredouani, M., et al. 2004. The scavenger receptor MARCO is required for lung defense against pneumococcal pneumonia and inhaled particles. J. Exp. Med. 200: 267-272.

CHROMOSOMAL LOCATION

Genetic locus: MARCO (human) mapping to 2q14.2; Marco (mouse) mapping to 1 E2.3.

SOURCE

MARCO (H-50) is a rabbit polyclonal antibody raised against amino acids 198-247 mapping within an extracellular domain of MARCO of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MARCO (H-50) is recommended for detection of MARCO of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MARCO siRNA (h): sc-75747, MARCO siRNA (m): sc-75748, MARCO shRNA Plasmid (h): sc-75747-SH, MARCO shRNA Plasmid (m): sc-75748-SH, MARCO shRNA (h) Lentiviral Particles: sc-75747-V and MARCO shRNA (m) Lentiviral Particles: sc-75748-V.

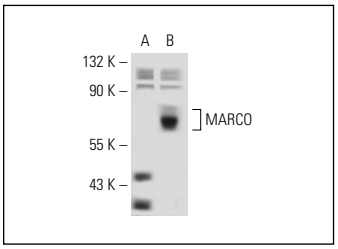
Molecular Weight of MARCO: 53 kDa.

Positive Controls: MARCO (h): 293T Lysate: sc-159726.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MARCO (H-50): sc-68913. Western blot analysis of MARCO expression in non-transfected: sc-117752 (**A**) and human MARCO transfected: sc-159726 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Braun, B.J., et al. 2011. The formyl peptide receptor like-1 and scavenger receptor MARCO are involved in glial cell activation in bacterial meningitis. J. Neuroinflammation 8: 11.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.