

MAdCAM-1 (H-3): sc-365934

BACKGROUND

The recirculation of lymphocytes through different organs is thought to be regulated by adhesion molecules ("homing receptors") recognizing tissue-specific vascular addressins on the endothelium. The mucosal vascular addressin, MAdCAM-1 (mucosal addressin cell adhesion molecule 1), is an immunoglobulin superfamily adhesion molecule for lymphocytes that is expressed by mucosal venules and helps direct lymphocyte traffic into Peyer's patches and the intestinal lamina propria. MAdCAM-1 acts as an endothelial cell ligand for leukocyte homing receptors L-Selectin and Integrin $\alpha 4/\beta 7$. MAdCAM-1 is strongly expressed on inflamed portal vein/sinusoidal endothelium in autoimmune-mediated liver disease and plays a major contributory role in the progression of chronic experimental autoimmune encephalomyelitis.

CHROMOSOMAL LOCATION

Genetic locus: MADCAM1 (human) mapping to 19p13.3; Madcam1 (mouse) mapping to 10 C1.

SOURCE

MAdCAM-1 (H-3) is a mouse monoclonal antibody raised against amino acids 291-406 mapping at the C-terminus of MAdCAM-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MAdCAM-1 (H-3) is available conjugated to agarose (sc-365934 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365934 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365934 PE), fluorescein (sc-365934 FITC), Alexa Fluor® 488 (sc-365934 AF488), Alexa Fluor® 546 (sc-365934 AF546), Alexa Fluor® 594 (sc-365934 AF594) or Alexa Fluor® 647 (sc-365934 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365934 AF680) or Alexa Fluor® 790 (sc-365934 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

MAdCAM-1 (H-3) is recommended for detection of MAdCAM-1 (all isoforms) of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 MAdCAM-1 siRNA (h): sc-43037, MAdCAM-1 siRNA (m): sc-43038, MAdCAM-1 shRNA Plasmid (h): sc-43037-SH, MAdCAM-1 shRNA Plasmid (m): sc-43038-SH, MAdCAM-1 shRNA (h) Lentiviral Particles: sc-43037-V and MAdCAM-1 shRNA (m) Lentiviral Particles: sc-43038-V.

Molecular Weight (predicted) of MAdCAM-1 isoforms: 40/29 kDa.

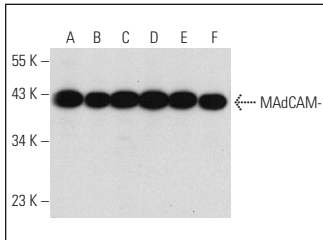
Molecular Weight (observed) of MAdCAM-1 isoforms: 29/40/55-60 kDa.

Positive Controls: A549 cell lysate: sc-2413, MDA-MB-231 cell lysate: sc-2232 or NCI-H292 whole cell lysate: sc-364179.

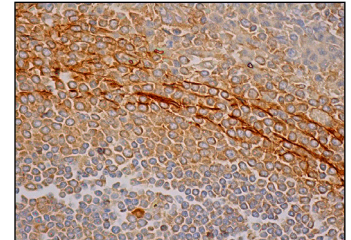
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



MAdCAM-1 (H-3): sc-365934. Western blot analysis of MAdCAM-1 expression in A549 (A), MDA-MB-231 (B), NCI-H292 (C), NCI-H460 (D), NCI-H1299 (E) and MDA-MB-468 (F) whole cell lysates.



MAdCAM-1 (H-3): sc-365934. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic and membrane staining of cells in white pulp and cells in red pulp.

SELECT PRODUCT CITATIONS

1. Wang, J., et al. 2015. Doxorubicin induces apoptosis by targeting MAdCAM1 and Akt and inhibiting protein translation initiation in hepatocellular carcinoma cells. *Oncotarget* 6: 24075-24091.

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 for detailed protocols and support products.

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