SANTA CRUZ BIOTECHNOLOGY, INC.

MAdCAM-1 (m): 293T Lysate: sc-121483

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.

REFERENCES

1. Berlin, C., et al. 1993. $\alpha 4\beta 7$ integrin mediates lymphocyte binding to the mucosal vascular addressin MAdCAM-1. Cell 74: 185-195.
2. Hamann, A., et al. 1994. Role of $\alpha 4$-integrins in lymphocyte homing to mucosal tissues *in vivo*. J. Immunol. 152: 3282-3293.
3. Wang, C.C., et al. 2000. Homeodomain factor Nkx-2.3 controls regional expression of leukocyte homing coreceptor MAdCAM-1 in specialized endothelial cells of the viscera. Dev. Biol. 224: 152-167.
4. Kanwar, J.R., et al. 2000. Prevention of a chronic progressive form of experimental autoimmune encephalomyelitis by an antibody against mucosal addressin cell adhesion molecule-1, given early in the course of disease progression. Immunol. Cell Biol. 78: 641-645.
5. Guilliano, M.J., et al. 2001. The micro-environment of human Peyer's patches inhibits the increase in CD38 expression associated with the germinal center reaction. J. Immunol. 166: 2179-2185.
6. Grant, A.J., et al. 2001. MAdCAM-1 expressed in chronic inflammatory liver disease supports mucosal lymphocyte adhesion to hepatic endothelium (MAdCAM-1 in chronic inflammatory liver disease). Hepatology 33: 1065-1072.

CHROMOSOMAL LOCATION

Genetic locus: Madcam1 (mouse) mapping to 10 C1.

PRODUCT

MAdCAM-1 (m): 293T Lysate represents a lysate of mouse MAdCAM-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

MAdCAM-1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive MAdCAM-1 antibodies. Recommended use: 10-20 µl per lane.

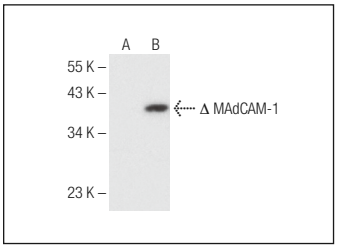
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MAdCAM-1 (F-6): sc-374398 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse MAdCAM-1 expression in MAdCAM-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

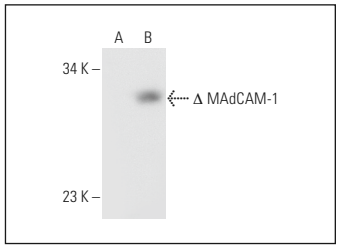
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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.

DATA



MAdCAM-1 (F-6): sc-374398. Western blot analysis of MAdCAM-1 expression in non-transfected: sc-117752 (**A**) and truncated mouse MAdCAM-1 transfected: sc-121483 (**B**) 293T whole cell lysates.



MAdCAM-1 (MECA-367): sc-19604. Western blot analysis of MAdCAM-1 expression in non-transfected: sc-117752 (**A**) and truncated mouse MAdCAM-1 transfected: sc-121483 (**B**) 293T whole cell lysates.

RESEARCH USE

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