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Datasheet for ABIN2192055
anti-MADCAM1 antibody

1 Publication

Overview

Quantity:	100 µg
Target:	MADCAM1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This MADCAM1 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunoassay (IA), Inhibition Assay (InhA)

Product Details

Clone:	314G8
Sterility:	0.2 µm filtered

Target Details

Target:	MADCAM1
Alternative Name:	Madcam-1 (MADCAM1 Products)
Background:	The monoclonal antibody 314G8 reacts with human mucosal addressin cell adhesion molecules-1 (MAdCAM-1), a key player in mediating the infiltration of leukocytes into chronically inflamed tissue. MAdCAM-1 is a cell-surface Ig superfamily member composed of two extracellular Ig domains, followed by a mucin-like domain, a transmembrane domain and a

Target Details

short cytoplasmatic domain. It interacts via its N- terminal Ig domain with the lymphocyte homing receptor alpha4beta7, which plays a critical role in forming the gut-associated lymphoid system. MAdCAM-1 promotes the adhesion of T- and B cells, monocytes/macrophages, and potentially eosinophils, basophils, and differentiated mast cells to the vascular endothelium. Mucosal addressin cell adhesion molecule-1 RNA transcripts are predominantly expressed in the small intestine, mesenteric lymph nodes, colon and spleen, and are very weakly expressed in human pancreas and brain. The monoclonal antibody 314G8 recognizes a site in the N-terminal Ig domain of MAdCAM-1. The monoclonal antibody 314G8 detects MAdCAM-1 on venules in the spleen and small intestine. MAdCAM-1 is strongly expressed in the synovium of osteoarthritis patients, predominantly on the endothelial lining of blood vessels, but also within the vessel lumen. The monoclonal antibody 314G8 may be useful in diagnosis of inflammation in humans by monitoring the presence and levels of MAdCAM-1.

Application Details

Application Notes: For immunohistology, flow cytometry and Western blotting dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. For inhibition of biological activity in vitro dilutions have to be made according to the amounts of MAdCAM-1 to be inactivated.

Restrictions: For Research Use only

Handling

Buffer: PBS, containing 0.1 % bovine serum albumin.

Storage: 4 °C

Storage Comment: Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year.

Expiry Date: 12 months

Publications

Product cited in: Pelletier, Okawara, Vitale, Anderson: "Differential distribution of the tight-junction-associated protein ZO-1 isoforms alpha+ and alpha- in guinea pig Sertoli cells: a possible association with F-actin and G-actin." in: **Biology of reproduction**, Vol. 57, Issue 2, pp. 367-76, (1997) ([PubMed](#)).

Van Itallie, Balda, Anderson: "Epidermal growth factor induces tyrosine phosphorylation and reorganization of the tight junction protein ZO-1 in A431 cells." in: **Journal of cell science**, Vol. 108 (Pt 4), pp. 1735-42, (1995) ([PubMed](#)).

Balda, Anderson: "Two classes of tight junctions are revealed by ZO-1 isoforms." in: **The American journal of physiology**, Vol. 264, Issue 4 Pt 1, pp. C918-24, (1993) ([PubMed](#)).

Willott, Balda, Heintzelman, Jameson, Anderson: "Localization and differential expression of two isoforms of the tight junction protein ZO-1." in: **The American journal of physiology**, Vol. 262, Issue 5 Pt 1, pp. C1119-24, (1992) ([PubMed](#)).

Kurihara, Anderson, Farquhar: "Diversity among tight junctions in rat kidney: glomerular slit diaphragms and endothelial junctions express only one isoform of the tight junction protein ZO-1." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 89, Issue 15, pp. 7075-9, (1992) ([PubMed](#)).