

**MONOCLONAL ANTIBODY TO
HUMAN MAdCAM-1
clone 314G8**



Catalog nr	HM2207 (lot number and expiry date are indicated on the label)
Description	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 short cytoplasmic 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.
Species	Mouse IgG ₁
Formulation	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin.
Application	The monoclonal antibody 314G8 can be used for Western blot, flow cytometry and immunohistology on frozen and paraffin embedded sections. Furthermore the monoclonal antibody 314G8 is useful for immunoassays and inhibition of biological activity.
Use	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.
Storage and stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and Federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result with the use of or derivation of this product.
References	1. Leung, E et al; Bioassay detects soluble MAdCAM-1 in body fluids. Immunol Cell Biol 2004, 82: 400
Also available	HM4004 Monoclonal antibody against Human ICAM-1, CD54, clone HM.1 HM4006 Monoclonal antibody against Human VCAM, CD106, clone 1G11B1 HM2156 Monoclonal antibody against Human S100A8/A9, clone 27E10 HM2193 Monoclonal antibody against Human nGAL, Lipocalin, clone 697 HM2164 Monoclonal antibody against Human MPO, clone 266-6G1