Datasheet: MCA532F

Description:	MOUSE ANTI HUMAN CD54:FITC
Specificity:	CD54
Other names:	ICAM-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	84H10
Isotype:	IgG1
Quantity:	100 TESTS

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Dog

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography from ascites

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.1% Sodium Azide (NaN_3) 0.2% Bovine Serum Albumin
Immunogen	K562 cell line.
External Database Links	**UniProt:** P05362 Related reagents **Entrez Gene:** 3383 ICAM1 Related reagents
RRID	AB_321785
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the MOPC 315 mouse myeloma cell line.
Specificity	**Mouse anti Human CD54 antibody, clone 84H10** recognizes the D1 domain of ICAM-1. It reacts with the ICAM-1 antigen found in low levels on lymphocytes and strongly expressed on monocytes and granulocytes. This molecule is inducible to high levels by mitogenic lectins on lymphocytes and by IL-1 beta or IFN gamma on other cell types such as fibroblasts and endothelial cells. Mouse anti Human CD54 antibody, clone 84H10 detects an antigen of ~90 kDa. Mouse anti Human CD54 antibody, clone 84H10 has been reported to block ICAM1 mediated cellular adhesion and block binding of LFA-1 and *P. falciparum* to ICAM-1. Mouse anti Human CD54 antibody, clone 84H10 is routinely tested in flow cytometry on rat splenocytes.
Flow Cytometry	Use 20ul of the suggested working dilution to label 5 x 10^5 cells or 100ul of whole blood.
References	1. Makgoba, M.W. *et al.* (1988) ICAM-1 a ligand for LFA-1-dependent adhesion of B, T and myeloid cells. Nature. 331 (6151): 86-8. 2. Damle, N.K. *et al.* (1992) Intercellular adhesion molecule-2, a second counter-receptor for CD11a/CD18 (leukocyte function-associated antigen-1), provides a costimulatory signal for T-cell receptor-initiated activation of human T cells. J Immunol. 148 (3): 665-71. 3. de Fougerolles, A.R. & Springer, T.A. (1992) Intercellular adhesion molecule 3, a third adhesion counter-receptor for lymphocyte function-associated molecule 1 on resting lymphocytes. J Exp Med. 175 (1): 185-90. 4. Galkowska, H. *et al.* (1996) Reactivity of antibodies directed against human antigens with surface markers on canine leukocytes. Vet Immunol Immunopathol. 53 (3-4): 329-34. 5. Rothlein, R. *et al.* (1986) A human intercellular adhesion molecule (ICAM-1) distinct from LFA-1. J Immunol. 137 (4): 1270-4. 6. Dustin, M.L. *et al.* (1986) Induction by IL 1 and interferon-gamma: tissue distribution, biochemistry, and function of a natural adherence molecule (ICAM-1). J Immunol. 137 (1): 245-54.

7. Simmons, D. *et al.* (1988) ICAM, an adhesion ligand of LFA-1, is homologous to the neural cell adhesion molecule NCAM. Nature. 331 (6157): 624-7.
8. Berendt, A.R. *et al.* (1992) The binding site on ICAM-1 for *Plasmodium falciparum*-infected erythrocytes overlaps, but is distinct from, the LFA-1-binding site. Cell. 68 (1): 71-81.
9. Dyugovskaya, L. *et al.* (2002) Increased adhesion molecules expression and production of reactive oxygen species in leukocytes of sleep apnea patients. Am J Respir Crit Care Med. 165: 934-9.
10. Bergmann-Leitner, E.S. *et al.* (2000) Differential role of Fas/Fas ligand interactions in cytolysis of primary and metastatic colon carcinoma cell lines by human antigen-specific CD8+ CTL. J Immunol. 164: 4941-54.
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13. Chen, P.Y. *et al.* (2015) Endothelial-to-mesenchymal transition drives atherosclerosis progression. J Clin Invest. 125 (12): 4514-28.
14. Salipante, S.J. *et al.* (2016) Recurrent somatic loss of TNFRSF14 in classical Hodgkin lymphoma. Genes Chromosomes Cancer. 55 (3): 278-87.

Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	Guaranteed until date of expiry. Please see product label.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M360169:191030'

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