Datasheet: MCA912

Description:	MOUSE ANTI HUMAN CD58
Specificity:	CD58
Other names:	LFA-3
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	BRIC5
Isotype:	IgG2a
Quantity:	0.2 mg

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	▪			1/10
Immunohistology - Frozen		▪		
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	TRIS buffered glycine
Preservative Stabilisers	<0.1% Sodium Azide (NaN_3)

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human erythrocytes.
External Database Links	**UniProt:** P19256 Related reagents **Entrez Gene:** 965 CD58 Related reagents
Synonyms	LFA3
RRID	AB_321506
Specificity	**Mouse anti Human CD58 antibody, clone BRIC5** recognizes human Lymphocyte function-associated antigen 3, also known as CD58 or LFA-3. CD58 is a 250 amino acid single pass type I transmembrane glycoprotein, a member of the immunoglobulin superfamily, with a predicted molecular mass of 28.1 kDa and an apparent molecular mass of ~55-70 kDa. CD58 occurs in two forms, one transmembrane with a cytoplasmic domain, the other form anchored in the membrane via a glycosylphosphatidylinositol tail. The complete amino acid sequence of both forms has been deduced from cDNA and is heavily N-glycosylated. CD58 is a cell adhesion molecule which plays a critical role in facilitation of antigen specific recognition through interaction with CD2 on T lymphocytes (Makgoba *et al.* 1989).CD58 has a wide tissue distribution, being present on erythrocytes, platelets, monocytes, a subset of lymphocytes, bone marrow cells, epithelium and endothelial cells. There are approximately 5,000 CD58 molecules on each erythrocyte. There is reduced expression of CD58 on haemopoietic cells in individuals with paroxysmal nocturnal haemoglobinuria. Mouse anti Human CD58 antibody, clone BRIC5 was produced in response to erythrocytes. The functional affinity of BRIC5 binding to erythrocytes is 4 x 10^8 M^{-1}. It reacts by immunoblotting to non-reduced erythrocyte membranes. BRIC5 is an indirect haemagglutinin. The antigen on erythrocytes is pronase sensitive. Mouse anti Human CD58 antibody, clone BRIC5 inhibits T cell rosetting.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Makgoba, M.W. *et al.* (1989) The CD2-LFA-3 and LFA-1-ICAM pathways: relevance to T-cell recognition. Immunol Today. 10 (12): 417-22. 2. Shaw, S. and Johnson, J.P. (1989) In Leucocyte Typing IV: White Cell Differentiation Antigens. Edited by Knapp, W., Dorken, B., Gilks, W.R., Rieber, E.P., Schmidt, R.E., Stein, H. and von dem Borne, A.E.G.Kr. Oxford University Press. pp 714-716. 3. Grundy, J.E. *et al.* (1993) Increased adherence of CD2 peripheral blood lymphocytes to cytomegalovirus-infected fibroblasts is blocked by anti-LFA-3 antibody. Immunology. 78 (3): 413-20. 4. Bottley, G. *et al.* (2005) Differential expression of LFA-3, Fas and MHC Class I on Ad5-

and Ad12-transformed human cells and their susceptibility to lymphokine-activated killer (LAK) cells. Virology. 338 (2): 297-308.
5. Bergmann-leitner, E.S. & Abrams, S.I. (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 (9): 4941-54.
6. Abbate, I. *et al.* (2001) Changes in host cell molecules acquired by circulating HIV-1 in patients treated with highly active antiretroviral therapy and interleukin-2. AIDS. 15 (1): 11-6.
7. Abbate, I. *et al.* (2005) Cell membrane proteins and quasispecies compartmentalization of CSF and plasma HIV-1 from aids patients with neurological disorders. Infect Genet Evol. 5 (3): 247-53.
8. Fletcher, J.M. *et al.* (1998) Natural killer cell lysis of cytomegalovirus (CMV)-infected cells correlates with virally induced changes in cell surface lymphocyte function-associated antigen-3 (LFA-3) expression and not with the CMV-induced down-regulation of cell surface class I HLA. J Immunol. 161 (5): 2365-74.
9. Cerboni, C. *et al.* (2000) Human cytomegalovirus strain-dependent changes in NK cell recognition of infected fibroblasts. J Immunol. 164 (9): 4775-82.
10. Pandolfino, M.C. *et al.* (2010) Comparison of three culture media for the establishment of melanoma cell lines. Cytotechnology. 62 (5): 403-12.
11. Kato, T. *et al.* (2002) Salivary cystatins induce interleukin-6 expression via cell surface molecules in human gingival fibroblasts. Mol Immunol. 39 (7-8): 423-30.
12. Kanuga, N. *et al.* (2002) Characterization of genetically modified human retinal pigment epithelial cells developed for *in vitro* and transplantation studies. Invest Ophthalmol Vis Sci. 43 (2): 546-55.

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10072 available at: 10072: https://www.bio-rad-antibodies.com/uploads/MSDS/10072.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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

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