Datasheet: MCA2459A647

Description:	MOUSE ANTI HUMAN CD138:Alexa Fluor® 647
Specificity:	CD138
Other names:	SYNDECAN-1
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	B-A38
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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

Product Form

Purified IgG conjugated to Alexa Fluor® 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

Preparation

Purified IgG prepared by ion exchange chromatography.

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.05 mg/ml

Immunogen

U266 cell line.

External Database Links

UniProt:
P18827 Related reagents

Entrez Gene:

6382 SDC1 Related reagents

Synonyms	SDC
Fusion Partners	Spleen cells from immunized Balb/c (Iffa Credo) mice were fused with cells of the mouse X63/Ag.8653 myeloma cell line.
Specificity	**Mouse anti human CD138 antibody, clone B-A38** recognizes human CD138, also known as Syndecan-1 (SDC-1). CD138 is a member of the transmembrane heparan sulfate proteoglycan family (O'Connell *et al.* 2004, Sanderson *et al.* 2008). It is composed of a core protein (comprising 3 domains; a short cytoplasmic domain, a transmembrane domain, and a long extracellular domain) and covalently attached heparan sulfate chains (Sanderson *et al.* 2008). Syndecan-1 is expressed on the surface of plasma cells within the hematopoietic system and on the surface of mature epithelial cells (O'Connell *et al.* 2004). It acts as an extracellular matrix receptor, involved in many cellular functions, including cell binding, cell signaling and cytoskeletal organization through cell-cell adhesion and cell-matrix adhesion (Sanderson *et al.* 2008).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Borset, M. *et al.* (1993) Lack of IL-1 secretion from human myeloma cells highly purified by immunomagnetic separation. Br J Haematol. 85 (3): 446-51. 2. Du, S. *et al.* (2010) Systemic mastocytosis in association with chronic lymphocytic leukemia and plasma cell myeloma. Int J Clin Exp Pathol. 3 (4): 448-57. 3. Kylänpää, L. *et al.* (2009) Syndecan-1 and tenascin expression in cystic tumors of the pancreas. JOP. 10 (4): 378-82. 4. Beauvais, D.M. *et al.* (2009) Syndecan-1 regulates alphavbeta3 and alphavbeta5 integrin activation during angiogenesis and is blocked by synstatin, a novel peptide inhibitor. J Exp Med. 206: 691-705. 5. Beauvais, D.M. and Rapraeger, A.C. (2010) Syndecan-1 couples the insulin-like growth factor-1 receptor to inside-out integrin activation J Cell Sci. 123: 3796-807. 6. Kim, Y.C. *et al.* (2010) Presence of *Porphyromonas gingivalis* and plasma cell dominance in gingival tissues with periodontitis. Oral Dis. 16: 375-81. 7. Chang, H. *et al.* (2010) CKS1B nuclear expression is inversely correlated with p27Kip1 expression and is predictive of an adverse survival in patients with multiple myeloma. Haematologica. 95: 1542-7. 8. Mahshid Y *et al.* (2009) High expression of 5-lipoxygenase in normal and malignant mantle zone B lymphocytes. BMC Immunol. 10: 2. 9. Guedez, L. *et al.* (2005) Tissue inhibitor of metalloproteinase 1 (TIMP-1) promotes plasmablastic differentiation of a Burkitt lymphoma cell line: implications in the pathogenesis of plasmacytic/plasmablastic tumors. Blood. 105: 1660-8. 10. Li, K. *et al.* (2010) Anaplastic lymphoma kinase-positive diffuse large B-cell lymphoma presenting as an isolated nasopharyngeal mass: a case report and review of literature. Int J Clin Exp Pathol. 4: 190-6. 11. Yang, Y. *et al.* (2007) The syndecan-1 heparan sulfate proteoglycan is a viable target for myeloma therapy. Blood. 110: 2041-8. 12. Thaunat, O. *et al.* (2010) Chronic rejection triggers the development of an aggressive intragraft immune response through recapitulation of lymphoid organogenesis. J Immunol. 185: 717-28. 13. Cannizzo, E. *et al.* (2012) The role of CD19 and CD27 in the diagnosis of multiple myeloma by flow cytometry: a new statistical model. Am J Clin Pathol. 137 (3): 377-86. 14. Li, K. *et al.* (2012) A rare and unique case of aggressive IgE-γ plasma cell myeloma in a

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20. Lum, D. & Wong, K.P. (2006) Sarcomatoid plasmacytoma: a diagnosis not often considered. Pathology. 38 (6): 593-6.
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26. Hourai, R. *et al.* (2017) IgG4-positive cell infiltration in various cardiovascular disorders - results from histopathological analysis of surgical samples. BMC Cardiovasc Disord. 17 (1): 52.
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Further Reading

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2. O'Connell, F.P. *et al.* (2004) CD138 (syndecan-1), a plasma cell marker immunohistochemical profile in hematopoietic and nonhematopoietic neoplasms. Am J Clin Pathol. 121:254-63.
3. Sanderson, R.D. *et al.* (2008) Syndecan-1: a dynamic regulator of the myeloma microenvironment. Clin Exp Metastasis. 25:149-59.

Storage

Store at +4^{o}C or at -20^{o}C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.
Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	18 months from date of despatch.
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
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:Alexa Fluor® 647 (MCA928A647)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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

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