

## Datasheet: MCA2459F BATCH NUMBER 1709

Description:	MOUSE ANTI HUMAN CD138:FITC	
Specificity:	CD138	
Other names:	SYNDECAN-1	
Format:	FITC	
Product Type:	Monoclonal Antibody	
Clone:	B-A38	
lsotype:	lgG1	
Quantity:	0.1 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 <u>www.bio-rad-antibodies.com/protocols</u> .			
		Yes No	Not Determined	Suggested Dilution
	Flow Cytometry	•		Neat
	Where this antibody has necessarily exclude its a guide only. It is recom system using appropriat	use in such proced mended that the u	ures. Suggested workin ser titrates the antibody	g dilutions are given as
Target Species	Human			
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 ion exchange chromatography			
Buffer Solution	Phosphate buffered saline			
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum A	lbumin		
Approx. Protein Concentrations	IgG concentration 0.1 m	ng/ml		

Immunogen	U266 cell line.
External Database Links	UniProt: <u>P18827</u> <u>Related reagents</u> Entrez Gene: <u>6382</u> SDC1 <u>Related reagents</u>
Synonyms	SDC
RRID	AB_566510
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 ( <u>O'Connell <i>et al.</i> 2004</u> , <u>Sanderson <i>et al.</i> 2008</u> ). 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 ( <u>Sanderson <i>et al.</i> 2008</u> ). Syndecan-1 is expressed on the surface of plasma cells within the hematopoietic system and on the surface of mature epithelial cells ( <u>O'Connell <i>et al.</i> 2004</u> ). 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 ( <u>Sanderson <i>et al.</i> 2008</u> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <li>Borset, M. <i>et al.</i> (1993) Lack of IL-1 secretion from human myeloma cells highly purified by immunomagnetic separation. <u>Br J Haematol. 85 (3): 446-51.</u></li> <li>Du, S. <i>et al.</i> (2010) Systemic mastocytosis in association with chronic lymphocytic leukemia and plasma cell myeloma. <u>Int J Clin Exp Pathol. 3 (4): 448-57.</u></li> <li>Kylänpää, L. <i>et al.</i> (2009) Syndecan-1 and tenascin expression in cystic tumors of the pancreas. <u>JOP. 10 (4): 378-82.</u></li> <li>Beauvais, D.M. <i>et al.</i> (2009) Syndecan-1 regulates alphavbeta3 and alphavbeta5 integrin activation during angiogenesis and is blocked by synstatin, a novel peptide inhibitor. <u>J Exp Med. 206: 691-705.</u></li> <li>Beauvais, D.M. and Rapraeger, A.C. (2010) Syndecan-1 couples the insulin-like growth factor-1 receptor to inside-out integrin activation <u>J Cell Sci. 123: 3796-807.</u></li> <li>Kim, Y.C. <i>et al.</i> (2010) Presence of <i>Porphyromonas gingivalis</i> and plasma cell dominance in gingival tissues with periodontitis. <u>Oral Dis. 16: 375-81.</u></li> <li>Chang, H. <i>et al.</i> (2010) CKS1B nuclear expression is inversely correlated with p27Kip1 expression and is predictive of an adverse survival in patients with multiple myeloma. <u>Haematologica. 95: 1542-7.</u></li> <li>Mahshid Y <i>et al.</i> (2009) High expression of 5-lipoxygenase in normal and malignant</li> </ol>

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Further Reading	1. Anttonen, A. et al. (1999) Syndecan-1 expression has prognostic significance in head
	and neck carcinoma. <u>Br J Cancer. 79 (3-4): 558-64.</u>
	2. O'Connell, F.P. <i>et al.</i> (2004) CD138 (syndecan-1), a plasma cell marker
	immunohistochemical profile in hematopoietic and nonhematopoietic neoplasms. <u>Am J</u>
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	3. Sanderson, R.D. <i>et al.</i> (2008) Syndecan-1: a dynamic regulator of the myeloma
	microenvironment. Clin Exp Metastasis. 25:149-59.
Storage	Store at +4°C or at -20°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.
Guarantee	12 months from date of despatch
Health And Safety	Material Safety Datasheet documentation #10041 available at:
Information	https://www.bio-rad-antibodies.com/SDS/MCA2459F
	10041
Regulatory	For research purposes only
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**Related Products** 

### **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

### **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376 Tel: +44 (0)1865 852 700 Worldwide America Fax: +1 919 878 3751 Fax: +44 (0)1865 852 739 Email: antibody\_sales\_us@bio-rad.com

Europe Email: antibody\_sales\_uk@bio-rad.com

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 'M366950:200529'

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