Datasheet: MCA884

BATCH NUMBER 160050

Description:	RAT ANTI MOUSE CD169
Specificity:	CD169
Other names:	SIALOADHESIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	3D6.112
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	▪			1/100 - 1/1000
Immunohistology - Frozen (1)	▪			1/50 - 1/100
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

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.

(1)**Bio-Rad recommend using fixation with either 2% paraformaldehyde or ethanol for optimal results.**

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified murine sialoadhesin.
External Database Links	**UniProt:** Q62230 Related reagents **Entrez Gene:** 20612 Siglec1 Related reagents
Synonyms	Sa, Sn
RRID	AB_322416
Fusion Partners	Spleen cells from an immunised AO rat were fused with the cells of the Y3 rat myeloma cell line.

Specificity

Rat anti Mouse CD169 antibody, clone 3D6.112 recognizes mouse CD169 also known as sialoadhesin, Sheep erythrocyte receptor or Siglec-1. CD169 is a 1695 amino acid, ~180 kDa single pass, type 1 transmembrane glycoprotein containing a single Ig-like V-type domain and sixteen Ig-like C2-type domains. CD169 is a macrophage restricted receptor, preferentially binding to alpha 2,3 linked sialic acid residues (Crocker *et al.* 1991) and is expressed on stromal macrophages in many tissues, particularly in lymph nodes, bone marrow and on marginal metallophilic macrophages in the spleen (Morris *et al.* 1991).

CD169 has been implicated in a number of roles including cell-cell interactions with lymphocytes (van den Berg *et al.* 1992) and granulocytes (Crocker *et al.* 1995). CD169 expressing macrophages have also been suggested to play a role in host resistance to lymphoma metastasis (Umansky *et al.* 1996). In pigs CD169 has also been identified as a macrophage restricted receptor for porcine reproductive and respiratory syndrome virus (Delputte *et al.* 2007). CD169 expressing macrophages have also been implicated in the regulation of autoimmune disease progression through their interaction with regulatory T cells via CD169 (Wu *et al.* 2009). CD169 has also been shown to play a critical role in the recognition and elimination of invasive sialylated microorganisms including *Campylobacter jejuni* (Klass *et al.* 2012) and group B Streptococcus (Chang *et al.* 2014).

The functional activity of rat anti mouse CD169 antibody, clone 3D6.112, its ability to inhibit binding of red blood cells to CD169 can be considerably enhanced by derivitization of the antibody with polyethylene glycol (Ducreux *et al.* 2008).

References

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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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA884 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550, DyLight®650, DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos., Biotin

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL (MCA1212)

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