

Datasheet: MCA884PE BATCH NUMBER INN1701

Description:	RAT ANTI MOUSE CD169:RPE
Specificity:	CD169
Other names:	SIALOADHESIN
Format:	RPE
Product Type:	Monoclonal Antibody
	•
Clone:	3D6.112
Clone: Isotype:	3D6.112 IgG2a

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 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	Mouse
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized
Reconstitution	Reconstitute with 1.0 ml distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.
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 (NaN ₃) 1% Bovine Serum Albumin 5% Sucrose

Immunogen	Purified murine sialoadhesin.			
External Database Links	UniProt: <u>Q62230</u>	Related reagents		

Entrez Gene:

20612 Siglec1 Related reagents

Synonyms

Sa, Sn

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 <u>Ig-like V-type</u> domain and sixteen <u>Ig-like C2-type</u> domains. CD169 is a macrophage restricted receptor, preferentially binding to alpha 2,3 linked sialic acid residues (<u>Crocker et al. 1991</u>) and is expressed on stromal macrophages in many tissues, particularly in lymph nodes, bone marrow and on marginal metallophilic macrophages in the spleen (<u>Morris et al. 1991</u>).

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 (<u>Ducreux et al. 2008</u>).

Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).

References

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Storage

Prior to reconstitution store at +4°C.

After reconstitution store at +4°C.

DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #20487 available at:

https://www.bio-rad-antibodies.com/SDS/MCA884PE

20487

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:RPE (MCA1212PE)

Recommended Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A) MOUSE SEROBLOCK FcR (BUF041B)

America

North & South Tel: +1 800 265 7376 Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

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