Datasheet: MCA5787GA

Description:	MOUSE ANTI HUMAN SIGLEC-5/SIGLEC-14
Specificity:	SIGLEC-5/SIGLEC-14
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1A5
Isotype:	IgG1
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/25 - 1/200
Immunohistology - Frozen			▪	
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.

Target Species

Human

Species Cross Reactivity

Reacts with: Chimpanzee

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Siglec-5-Fc protein, consisting of the full-length extracellular region of human Siglec-5, fused with the Fc region of human IgG1.
External Database Links	**UniProt:** O15389 Related reagents Q08ET2 Related reagents **Entrez Gene:** 8778 SIGLEC5 Related reagents 100049587 SIGLEC14 Related reagents
Synonyms	CD33L2, OBBP2
RRID	AB_11152943
Specificity	**Mouse anti Human Siglec-5/Siglec-14 antibody, clone 1A5** recognizes human Siglec-5 (Sialic acid-binding Ig-like lectin 5), otherwise known as CD170, a novel sialic-acid-binding Ig-like lectin, and member of the Ig superfamily, expressed by dendritic cells (DCs), activated macrophages, neutrophils, and cells of the monocyte/myeloid lineage. Mouse anti Human Siglec-5/Siglec-14 antibody, clone 1A5, is one of several Siglec-5 antibodies which also recognises human Siglec-14 (Angata *et al.* 2006). Siglec-14 shares an almost identical sequence with Siglec-5 within the first two Ig-like domains, indicating partial gene conversion between these two Siglecs, also evident in other primate species. Siglec-5 is also related to the myelomonocytic-derived adhesion molecule CD33 (Siglec-3), and mediates sialic-acid dependent binding to cells, as well as acting as an inhibitory receptor in the down-regulation of cell activation. Structurally, Siglec-5 contains an immunoreceptor tyrosine-based inhibitor motif (ITIM), which plays a part in the modulation of cellular responses, and when phosphorylated, can bind to the SH2 domain of several SH2-containing phosphatases. Siglec-14 is a putative sialic-acid binding adhesion molecule, and member of the Ig superfamily, predominantly expressed in hematopoietic tissues, which has been shown to associate with the activating adapter protein DAP12. Mouse anti Human Siglec-5/Siglec-14 antibody, clone 1A5 cross reacts with Chimpanzee (Jaroenpool *et al.* 2007).

Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells.
References	1. Cornish, A.L. *et al.* (1998) Characterization of siglec-5, a novel glycoprotein expressed on myeloid cells related to CD33. Blood. 92 (6): 2123-32. 2. Avril, T. *et al.* (2005) Siglec-5 (CD170) can mediate inhibitory signaling in the absence of immunoreceptor tyrosine-based inhibitory motif phosphorylation. J Biol Chem. 280 (20): 19843-51. 3. Nguyen, D.H. *et al.* (2006) Loss of Siglec expression on T lymphocytes during human evolution. Proc Natl Acad Sci U S A. 103 (20): 7765-70. 4. Jaroenpool, J. *et al.* (2007) Differences in the constitutive and SIV infection induced expression of Siglecs by hematopoietic cells from non-human primates. Cell Immunol. 250 (1-2): 91-104. 5. Angata, T. *et al.* (2006) Discovery of Siglec-14, a novel sialic acid receptor undergoing concerted evolution with Siglec-5 in primates. FASEB J. 20: 1964-1973.
Further Reading	1. Crocker, P.R. (2005) Siglecs in innate immunity. Curr Opin Pharmacol. 5 (4): 431-7.
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: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

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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