

Datasheet: MCA5787GA

BATCH NUMBER 0811

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 G from tissue culture

supernatant

Buffer Solution Phosphate buffered saline

Preservative Stabilisers 0.09% Sodium Azide (NaN₃)

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	<ol style="list-style-type: none"> 1. Cornish, A.L. <i>et al.</i> (1998) Characterization of siglec-5, a novel glycoprotein expressed on myeloid cells related to CD33. Blood. 92 (6): 2123-32. 2. Avril, T. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (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	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	<p>Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA5787GA</p> <p>10040</p>
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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Worldwide

Tel: +44 (0)1865 852 700

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Tel: +49 (0) 89 8090 95 21

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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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