

## Datasheet: MCA5787PE

**BATCH NUMBER 166028**

<b>Description:</b>	MOUSE ANTI HUMAN SIGLEC-5/SIGLEC-14:RPE
<b>Specificity:</b>	SIGLEC-5/SIGLEC-14
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1A5
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

### 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

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.

<b>Target Species</b>	Human								
<b>Species Cross Reactivity</b>	Reacts with: Chimpanzee <b>N.B.</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.								
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized								
<b>Reconstitution</b>	Reconstitute with 1.0ml distilled water								
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
RPE 488nm laser	496	578							
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant								

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% Bovine Serum Albumin 5% Sucrose
<b>Immunogen</b>	Siglec-5-Fc protein, consisting of the full-length extracellular region of human Siglec-5, fused with the Fc region of human IgG1.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">O15389</a>    <a href="#">Related reagents</a></p> <p><a href="#">Q08ET2</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">8778</a>    SIGLEC5    <a href="#">Related reagents</a></p> <p><a href="#">100049587</a>    SIGLEC14    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD33L2, OBBP2
<b>Specificity</b>	<p><b>Mouse anti Human Siglec-5/Siglec-14 antibody, clone 1A5</b> 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.</p> <p>Mouse anti Human Siglec-5/Siglec-14 antibody, clone 1A5, is one of several Siglec-5 antibodies which also recognises human Siglec-14 (<a href="#">Angata et al. 2006</a>). 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.</p> <p>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.</p> <p>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 (<a href="#">Jaroenpool et al. 2007</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells.
<b>References</b>	<ol style="list-style-type: none"> <li>Cornish, A.L. <i>et al.</i> (1998) Characterization of siglec-5, a novel glycoprotein expressed on myeloid cells related to CD33. <a href="#">Blood. 92 (6): 2123-32.</a></li> <li>Avril, T. <i>et al.</i> (2005) Siglec-5 (CD170) can mediate inhibitory signaling in the absence of immunoreceptor tyrosine-based inhibitory motif phosphorylation. <a href="#">J Biol Chem. 280 (20):</a></li> </ol>

[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.](#)

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**Further Reading** 1. Crocker, P.R. (2005) Siglecs in innate immunity. [Curr Opin Pharmacol. 5 \(4\): 431-7.](#)

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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. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA5787PE>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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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](https://www.bio-rad-antibodies.com/datasheets)

'M419230:230613'

**Printed on 18 Jan 2024**

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