

## Purified anti-human CD170 (Siglec-5) Antibody

<b>Catalog# / Size</b>	352002 / 100 µg
<b>Clone</b>	1A5
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	VII 70443
<b>Other Names</b>	OBBP2, CD33L2, OB-BP2
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	CD170, also known as Siglec-5, is a single pass transmembrane protein member of the immunoglobulin superfamily. On the cell surface, CD170 forms a 140 kD dimer. The cytoplasmic domain of Siglec-5 contains two ITIM motifs that recruit the tyrosine-phosphatases SHP-1 and SHP-2 after tyrosine-phosphorylation, which in turn results in the inhibition of cell signaling. Siglec-5 is expressed by granulocytes, monocytes/macrophages, subsets of lymphocytes, and a subset of activated dendritic cells. Siglec-5 binds α2,3- and α2,6-linked sialic acid as well as glycophorin A, and is involved in cell adhesion.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Chimpanzee, Bonobo, Gorilla
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Extracellular region of Siglec-5
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">ELISA - Reported in the literature, not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	The 1A5 antibody cross-reacts with Siglec-14 <sup>4</sup> . Additional reported applications (for the relevant formats) include: ELISA <sup>2</sup> .  Clone 1A5 cross-reacts to Gorilla <sup>2</sup>
<b>Application References</b> (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"><li>1. Cornish AL, <i>et al.</i> 1998. <i>Blood</i> 92:2123.</li><li>2. Nguyen DH, <i>et al.</i> 2006. <i>P. Natl. Acad. Sci. USA</i> 103:7765. (FC, ELISA)</li><li>3. Connolly NP, <i>et al.</i> 2002. <i>Br. J. Haematol.</i> 119:221.</li><li>4. Angata T, <i>et al.</i> 2006. <i>FASEB J.</i> 20:1964.</li><li>5. Avril T, <i>et al.</i> 2005. <i>J. Biol. Chem.</i> 280:19843.</li></ol>
<b>Product Citations</b>	<ol style="list-style-type: none"><li>1. Tseng YW, <i>et al.</i> 2021. <i>Front Cell Infect Microbiol.</i> 613195:11. <a href="#">PubMed</a></li></ol>
<b>RRID</b>	AB_10896789 (BioLegend Cat. No. 352002)

## Antigen Details

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<b>Structure</b>	Member of the immunoglobulin superfamily, single pass transmembrane protein, forms a 140 kD dimer; cytoplasmic domain contains two ITIM motifs
<b>Distribution</b>	Granulocytes, monocytes/macrophages, subsets of lymphocytes, and activated dendritic cells
<b>Function</b>	Inhibitory receptor, cell adhesion
<b>Interaction</b>	SHP-1, SHP-2
<b>Ligand/Receptor</b>	$\alpha$ 2,3- and $\alpha$ 2,6-linked sialic acid, glycoporphin A
<b>Cell Type</b>	B cells, Dendritic cells, Granulocytes, Lymphocytes, Macrophages, Monocytes
<b>Biology Area</b>	Cell Adhesion, Cell Biology, Immunology
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules, Siglec Molecules
<b>Antigen References</b>	1. Soto PC, <i>et al.</i> 2010. <i>J. Immunol.</i> 184:4185. 2. Carlin AF, <i>et al.</i> 2009. <i>J. Exp. Med.</i> 206:1691. 3. Zhuravleva MA. 2008. <i>J. Mol. Biol.</i> 375:437.
<b>Gene ID</b>	<a href="#">8778</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

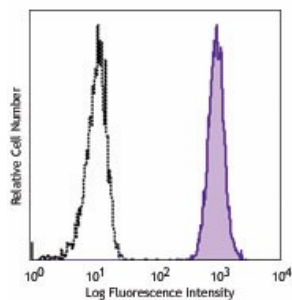
## Other Formats

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Purified anti-human CD170 (Siglec-5), PE anti-human CD170 (Siglec-5), APC anti-human CD170 (Siglec-5)

## Product Data

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Human peripheral blood granulocytes were stained with Siglec-5 (clone 1A5) PE (filled histogram) or mouse IgG1,  $\kappa$  PE isotype control (open histogram).

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