

## FITC anti-human CD100 Antibody

<b>Catalog# / Size</b>	328406 / 100 tests
<b>Clone</b>	A8
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Sema4D
<b>Isotype</b>	Mouse IgG1, κ

**Description** CD100, a 150 kD homodimer, is a novel semaphorin that induces B cells to aggregate and improves their viability in vitro. Semaphorins are neuronal chemorepellants that direct pioneering neurons during nervous system development. CD100 modifies CD40-CD40L B cell signaling by augmenting B cell aggregation and survival and down regulating CD23 expression. CD72 is a lymphocyte receptor for the class IV semaphorin CD100, which is involved in regulating B cell signaling. CD100 is expressed on resting and PHA stimulated T cells. The protein is weakly expressed on NK cells, EBV transformed B cells, monocytes and tumor/peripheral blood T cell lines, and at higher density on activated T cells and B cells.

### Product Details

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<b>Reactivity</b>	Human, African Green, Baboon, Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human PHA activated lymphocytes
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</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 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
<b>Excitation Laser</b>	Blue Laser (488 nm)
<b>Application References</b> (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"> <li>Hall K, <i>et al.</i> 1996. <i>P. Natl. Acad. Sci. USA</i> 93:11780.</li> <li>Mizrahi S, <i>et al.</i> 2007. <i>PLoS One.</i> 2(9):e818.</li> <li>Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC)</li> </ol>
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>Grandclaudon M, <i>et al.</i> 2019. <i>Cell.</i> 179:432. <a href="#">PubMed</a></li> </ol>
<b>RRID</b>	AB_2254362 (BioLegend Cat. No. 328406)

### Antigen Details

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<b>Structure</b>	Class IV semaphorin family member, 150 kD homodimer
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<b>Distribution</b>	T cells, B cells, weak on NK cells
<b>Function</b>	Costimulatory molecule in adaptive immune responses that switches off negative signaling from CD72
<b>Cell Type</b>	T cells, B cells, NK cells
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>Schlossman SL Bloumsell W Gilks et al. eds. 1995. Leucocyte Typing V:White Cell Differentiation Antigens. Oxford University Press New York.</li> <li>Bougeret CIG Mansur H Dastot et al. 1992. Increased surface expression of a newly identified 150 kDa dimer early after human T lymphocyte activation. <i>J. Immunol.</i> 148:318.</li> <li>Knapp WB Dorken EP. Rieber et al, eds. 1989. Leucocyte Typing IV:White Cell Differentiation Antigens. Oxford University Press New York.</li> </ol>
<b>Gene ID</b>	<a href="#">10507</a>

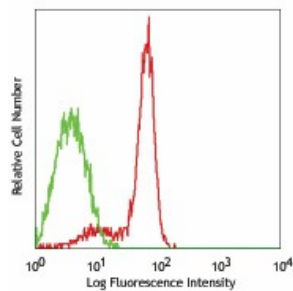
## Other Formats

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Purified anti-human CD100, FITC anti-human CD100, PE anti-human CD100

## Product Data

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Human peripheral blood lymphocytes stained with A8 FITC

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