

## FITC anti-human CD312 (EMR2) Antibody

<b>Catalog# / Size</b>	373105 / 25 tests 373106 / 100 tests
<b>Clone</b>	W15101A
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Epidermal growth factor module-containing mucin-like receptor 2, EMR2, AGRE2, ADGRE2
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	CD312, also known as Epidermal growth factor module-containing mucin-like receptor 2 (EMR2), is a 90 kD type I protein, a member of the Epidermal Growth Factor-seven transmembrane (EGF-TM7) family. Its extracellular region consists of five tandem EGF-like adhesion domains and a mucin-like stalk domain containing a G-protein proteolytic site, while the C-terminal region consists of a seven-pass transmembrane domain. CD312 is expressed by myeloid cells, dendritic cells, and activated lymphocytes. CD312 contributes to the interaction of macrophages, dendritic cells and activated T cells with B cells; it is involved in neutrophil chemotaxis, degranulation and adhesion, and release of inflammatory cytokines by macrophages. The ligands of CD312 are the glycosaminoglycans (GAG) chondroitin sulphate, and dermatan sulphate.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Recombinant protein fragment containing the first extracellular region of human EMR2 (24-540 a.a.).
<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. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Blue Laser (488 nm)
<b>RRID</b>	AB_2922589 (BioLegend Cat. No. 373105) AB_2922589 (BioLegend Cat. No. 373106)

### Antigen Details

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<b>Structure</b>	Member of the Epidermal Growth Factor-seven transmembrane (EGF-TM7) family, type I protein, its extracellular region consists of five tandem EGF-like adhesion domains and a mucin-like stalk domain containing a G-protein proteolytic site; the C-terminal re
<b>Distribution</b>	Expressed by myeloid cells, dendritic cells, and activated lymphocytes.

<b>Function</b>	Involved in neutrophil chemotaxis, degranulation and adhesion. Promotes the release of inflammatory cytokines by macrophages. Contributes in the interaction of macrophages, dendritic cells and activated T cells with B cells.
<b>Ligand/Receptor</b>	Chondroitin sulphate, dermatan sulphate.
<b>Cell Type</b>	Dendritic cells, Lymphocytes, Neutrophils
<b>Biology Area</b>	Cell Adhesion, Cell Biology, Immunology
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Boyden SE, <i>et al.</i> 2016. <i>N. Engl. J. Med.</i> 374:656.</li> <li>2. Lewis SM, <i>et al.</i> 2015. <i>Clin. Exp. Immunol.</i> 182:184.</li> <li>3. Huang YS, <i>et al.</i> 2012. <i>Mol. Cell Biol.</i> 32:1408.</li> <li>4. Rutkowski MJ, <i>et al.</i> 2011. <i>J. Neurooncol.</i> 105:165.</li> <li>5. van Eijk M, <i>et al.</i> 2010. <i>Immunol. Lett.</i> 129:64.</li> </ol>
<b>Gene ID</b>	<a href="#">30817</a>

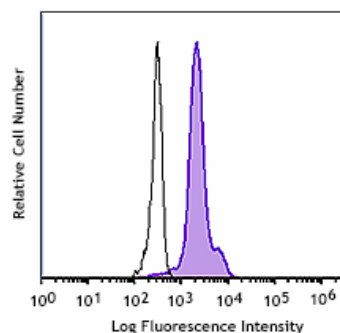
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human CD312 (EMR2), PE/Cyanine7 anti-human CD312 (EMR2), FITC anti-human CD312 (EMR2)

## Product Data



Human peripheral blood monocytes were stained with anti-human CD312 (clone W15101A) FITC (filled histogram) or rat IgG2a,  $\kappa$  FITC isotype control (open histogram).

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