

## Alexa Fluor® 647 anti-mouse/human CD15 (SSEA-1) Antibody

<b>Catalog# / Size</b>	125607 / 25 tests 125608 / 100 tests
<b>Clone</b>	MC-480
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Stage-Specific Embryonic Antigen 1, X-hapten, Lewis X, 3-FAL, CD15, SSEA1, SSEA-1
<b>Isotype</b>	Mouse IgM, κ
<b>Description</b>	The MC-480 antibody reacts with mouse and human Stage-Specific Embryonic Antigen-1 (SSEA-1). It is a Lewis blood group related carbohydrate antigen, also known as X-hapten, Lewis X, 3-FAL, 3-fucosyl-N-acetylactosamine, or CD15. The expression pattern of SSEA-1 antigen is different in humans than in mice. In mice, SSEA-1 is expressed on embryonic stem cells (ES), embryonal carcinoma cells (EC), 8-cell to blastocyst embryos, and a subset of embryonic inner cell mass. The expression on murine ES cells is decreased upon differentiation. In humans, however, SSEA-1 is not found on undifferentiated ES cells, but its expression is upregulated along with differentiation. CD15 is highly expressed on adult human granulocytes. It has been reported that SSEA-1 plays a role in cell adhesion and regulation of cell differentiation.

### Product Details

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<b>Verified Reactivity</b>	Human, Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Mouse F9 Teratocarcinoma Stem Cells (X-irradiated)
<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 Alexa Fluor® 647 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.  * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.  Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.  <a href="#">View full statement regarding label licenses</a>
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunoprecipitation <sup>1</sup> , Western blotting <sup>1</sup> , and immunohistochemistry <sup>1</sup> of acetone-fixed frozen tissue sections and formalin-fixed paraffin-embedded sections.
<b>Application References</b>	1. Solter D and Knowles BB. 1978. <i>Proc. Natl. Acad. Sci. USA</i> . 75:5565. (IHC, IP, WB)
<b>(PubMed link indicates BioLegend citation)</b>	

## Product Citations

1. Zhang J, *et al.* 2018. *Nature*. 562:595. [PubMed](#)
2. Wu L, *et al.* 2021. *Cell Prolif.* 54:e13133. [PubMed](#)
3. Lynch TJ *et al.* 2018. *Cell stem cell.* 22(5):653-667 . [PubMed](#)
4. Kim S, *et al.* 2015. *Cancer Lett.* Available online 29 August 2015. [PubMed](#)
5. Mity MA, *et al.* 2020. *American Journal of Physiology-Cell Physiology.* 318(2):C380-C391. [PubMed](#)
6. Chen J, *et al.* 2016. *Cell Rep.* S2211-1247(16)00033-4. [PubMed](#)
7. Deb S, *et al.* 2021. *EMBO Rep.* 22:e49328. [PubMed](#)
8. Yu S, *et al.* 2022. *Nat Commun.* 13:2756. [PubMed](#)
9. Borkent M, *et al.* 2016. *Stem Cell Reports.* 6: 704-716. [PubMed](#)
10. Hill RJ, *et al.* 2019. *Nat Genet.* 51:1283. [PubMed](#)
11. Fujino N, *et al.* 2019. *J Exp Med.* 216:2184. [PubMed](#)
12. Vojtek M, *et al.* 2021. *Life Sci Alliance.* 4:. [PubMed](#)

## RRID

AB\_1089190 (BioLegend Cat. No. 125607)  
AB\_1089188 (BioLegend Cat. No. 125608)

## Antigen Details

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<b>Structure</b>	Carbohydrate epitope, Lewis blood group antigens
<b>Distribution</b>	Murine embryonic stem cells (ES), embryonal carcinoma cells, 8-cell to blastocyst embryos; human differentiated cells, not on undifferentiated ES cells
<b>Function</b>	Adhesion, differentiation
<b>Cell Type</b>	Embryonic Stem Cells, Neural Stem Cells
<b>Biology Area</b>	Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers, Stem Cells
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Solter D and Knowles BB. 1978. <i>Proc. Natl. Acad. Sci. USA.</i> 75:5565.</li><li>2. Harris JF, <i>et al.</i> 1984. <i>J. Immunol.</i> 132:2502.</li><li>3. Gooi HC, <i>et al.</i> 1981. <i>Nature</i> 292:156.</li><li>4. Cui L, <i>et al.</i> 2004. <i>J. Histochem. Cytochem.</i> 52:1447.</li></ol>
<b>Gene ID</b>	<a href="#">14345</a> <a href="#">2526</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

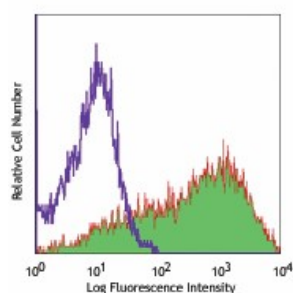
## Other Formats

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PE anti-mouse/human CD15 (SSEA-1), Biotin anti-mouse/human CD15 (SSEA-1), Purified anti-mouse/human CD15 (SSEA-1), Alexa Fluor® 647 anti-mouse/human CD15 (SSEA-1), Alexa Fluor® 488 anti-mouse/human CD15 (SSEA-1), FITC anti-mouse/human CD15 (SSEA-1), TotalSeq™-A0076 anti-mouse/human CD15 (SSEA-1), APC anti-mouse/human CD15 (SSEA-1), TotalSeq™-C0076 anti-mouse/human CD15 (SSEA-1), TotalSeq™-B0076 anti-mouse/human CD15 (SSEA-1)

## Product Data

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F9 (mouse embryonic carcinoma cell line) stained with MC-480 Alexa Fluor® 647

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