

## Biotin anti-mouse/human CD15 (SSEA-1) Antibody

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| <b>Catalog# / Size</b>   | 125603 / 25 µg<br>125604 / 100 µg   |
| <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.  |
| <b>Preparation</b>                                | The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions.  |
| <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>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 ≤ 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>                          | 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> |  |
| <b>Product Citations</b>                          | 1. Sevinç K, <i>et al.</i> 2022. Stem Cell Reports. Online ahead of print. <a href="#">PubMed</a>  |
| <b>RRID</b>                                       | AB_1089195 (BioLegend Cat. No. 125603)<br>AB_1089194 (BioLegend Cat. No. 125604)   |

## 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><br><a href="#">2526</a>   |

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

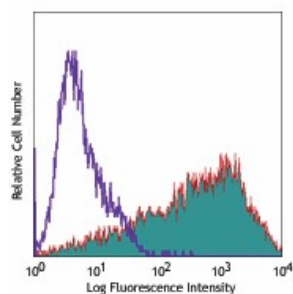
## Other Formats

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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 biotinylated MC-480, followed by Sav-PE

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587