

Alexa Fluor® 488 anti-mouse/human CD15 (SSEA-1) Antibody

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| Catalog# / Size | 125609 / 25 tests 125610 / 100 tests |
| Clone | MC-480 |
| Regulatory Status | RUO |
| Other Names | Stage-Specific Embryonic Antigen 1, X-hapten, Lewis X, 3-FAL, CD15, SSEA1, SSEA-1 |
| Isotype | Mouse IgM, κ |
| Description | 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-acetyllactosamine, 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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| Verified Reactivity | Human, Mouse |
| Antibody Type | Monoclonal |
| Host Species | Mouse |
| Immunogen | Mouse F9 Teratocarcinoma Stem Cells (X-irradiated) |
| Formulation | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA) |
| Preparation | The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 488 under optimal conditions. |
| Concentration | Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.) |
| Storage & Handling | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze. |
| Application | FC - Quality tested |
| Recommended Usage | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . 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® 488 has a maximum emission of 519 nm when it is excited at 488 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses |
| Excitation Laser | Blue Laser (488 nm) |
| Application Notes | Additional reported applications (for the relevant formats) include: immunoprecipitation ¹ , Western blotting ¹ , and immunohistochemistry ¹ of acetone-fixed frozen tissue sections and formalin-fixed paraffin-embedded sections. |
| Application References | 1. Solter D and Knowles BB. 1978. <i>Proc. Natl. Acad. Sci. USA.</i> 75:5565. (IHC, IP, WB) |
| (PubMed link indicates BioLegend citation) | |

Product Citations

1. Yu L, *et al.* 2020. *Cell Stem Cell*. 28(3):550-567.e12. [PubMed](#)
2. Sun HL, *et al.* 2020. *Molecular Cell*. 80(4):633-647.e7. [PubMed](#)

RRID

AB_1089191 (BioLegend Cat. No. 125609)
AB_1089189 (BioLegend Cat. No. 125610)

Antigen Details

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| Structure | Carbohydrate epitope, Lewis blood group antigens |
| Distribution | Murine embryonic stem cells (ES), embryonal carcinoma cells, 8-cell to blastocyst embryos; human differentiated cells, not on undifferentiated ES cells |
| Function | Adhesion, differentiation |
| Cell Type | Embryonic Stem Cells, Neural Stem Cells |
| Biology Area | Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers, Stem Cells |
| Molecular Family | CD Molecules |
| Antigen References | <ol style="list-style-type: none">1. Solter D and Knowles BB. 1978. <i>Proc. Natl. Acad. Sci. USA</i>. 75:5565.2. Harris JF, <i>et al.</i> 1984. <i>J. Immunol.</i> 132:2502.3. Gooi HC, <i>et al.</i> 1981. <i>Nature</i> 292:156.4. Cui L, <i>et al.</i> 2004. <i>J. Histochem. Cytochem.</i> 52:1447. |
| Gene ID | 14345 2526 |

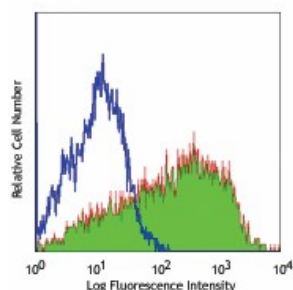
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

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



F9 (mouse embryonic carcinoma cell line) stained with MC-480 Alexa Fluor® 488

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