

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

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

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

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

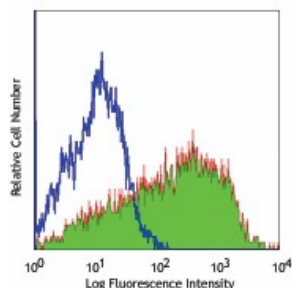
Related Protocols

[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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