

## TotalSeq™-B0076 anti-mouse/human CD15 (SSEA-1) Antibody

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| <b>Catalog# / Size</b>   | 125621 / 10 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>Barcode Sequence</b>  | GCTAGTTTGTGCTGC  |
| <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-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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| <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 1 mM EDTA  |
| <b>Preparation</b>              | The antibody was purified by chromatography and conjugated with TotalSeq™-B oligomer 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="#">PG - Quality tested</a>   |
| <b>Recommended Usage</b>        | <p>Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> and the oligomer sequence is confirmed by sequencing. TotalSeq™-B antibodies are compatible with 10x Genomics Single Cell Gene Expression <a href="#">Solutions</a>.</p> <p>To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.</p> <p>Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.</p> |
| <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>Additional Product Notes</b> | TotalSeq™ reagents are designed to profile protein levels at a single cell level following an   |

optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. [10x Genomics Chromium System and Reagents](#)) and sequencer (e.g. Illumina analyzers) are required. Please contact [technical support](#) for more information, or visit [biolegend.com/totalseq](#).

The barcode flanking sequences are GTGACTGGAGTTCAGACGTGTGCTCTTCCGATCTNNNNNNNNN (PCR handle), and NNNNNNNNGCTTTAAGGCCGGTCCTAGC\*A\*A (capture sequence). N represents either randomly selected A, C, G, or T, and \* indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our [Scientific Poster Library](#).

## Application References

(PubMed link indicates BioLegend citation)

RRID [AB\\_2860662](#) (BioLegend Cat. No. 125621)

## 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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[TotalSeq™-B or -C with 10x Feature Barcoding Technology](#)

## 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)

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