

## Alexa Fluor® 647 anti-human SSEA-4 Antibody

<b>Catalog# / Size</b>	330407 / 25 tests 330408 / 100 tests
<b>Clone</b>	MC-813-70
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Stage-Specific Embryonic Antigen-4, SSEA4
<b>Isotype</b>	Mouse IgG3, κ
<b>Description</b>	The MC813-70 antibody reacts with a carbohydrate antigen which is named as Stage-Specific Embryonic Antigen-4 (SSEA-4). It is a terminal structure of globo-series glycolipids (NeuAcα2-3Galβ1-3GalNAcβ1-R). SSEA-4 is expressed on human teratocarcinoma cells (EC), embryonic stem cells (ESC), embryonic germ cells (EG), and preimplantation embryos, subset of mesenchymal stem cells, erythrocytes, and erythromyeloid leukemia cell line K562. The expression of SSEA-3 on human ESC is downregulated upon differentiation. SSEA-4 is also expressed by mouse on unfertilized eggs and preimplantation to early cleaved embryos.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Mouse, Baboon, Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human embryonic carcinoma cell line 2102Ep
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA); may contain stabilizer.
<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 633 nm / 635 nm.  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: ELISA <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. Kannagi R, <i>et al.</i> 1983. <i>The EMBO J.</i> 2:2355
<b>(PubMed link indicates BioLegend citation)</b>	

## Product Citations

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24. Menges J, *et al.* 2020. Stem Cell Research. 39:101517.. [PubMed](#)
25. Bi Y, *et al.* 2022. Nat Commun. 13:3147. [PubMed](#)

## RRID

AB\_1089201 (BioLegend Cat. No. 330407)  
AB\_1089200 (BioLegend Cat. No. 330408)

## Antigen Details

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<b>Structure</b>	Carbohydrate epitope on glycosphingolipids
<b>Distribution</b>	Human teratocarcinoma cells (EC), embryonic stem cells (ESC), embryonic germ cells (EG), preimplantation embryos, and erythrocytes; mouse oocytes, early cleaved embryos
<b>Function</b>	Regulation of differentiation
<b>Cell Type</b>	Embryonic Stem Cells, Mesenchymal Stem Cells, Neural Stem Cells
<b>Biology Area</b>	Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers, Stem Cells
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Kannagi R, <i>et al.</i> 1983. <i>The EMBO J.</i> 2:2355</li><li>2. Henderson JK, <i>et al.</i> 2002. <i>Stem Cells.</i> 20:329</li><li>3. Brimble SN, <i>et al.</i> 2007. <i>Stem Cells.</i> 25:54</li><li>4. Battula VL, <i>et al.</i> 2007. <i>Differentiation.</i> 75:279</li></ol>
<b>Gene ID</b>	NA

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

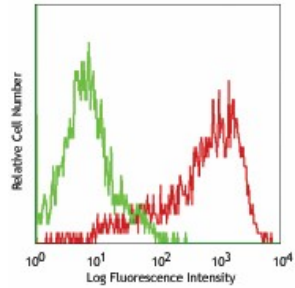
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Purified anti-human SSEA-4, Biotin anti-human SSEA-4, PE anti-human SSEA-4, Alexa Fluor® 647 anti-human SSEA-4, FITC anti-human SSEA-4, Alexa Fluor® 488 anti-human SSEA-4, Alexa Fluor® 594 anti-human SSEA-4, PE/Dazzle™ 594 anti-human SSEA-4, APC anti-human SSEA-4, PE/Cyanine7 anti-human SSEA-4

## Product Data

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NCCIT (human teratocarcinoma cell line)  
stained with MC-813-70 Alexa Fluor®  
647



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