

## PE anti-human SSEA-4 Antibody

<b>Catalog# / Size</b>	330405 / 25 tests 330406 / 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, $\kappa$
<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 (NeuAc $\alpha$ 2-3Gal $\beta$ 1-3GalNAc $\beta$ 1-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

<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 PE 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 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 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>	
<b>Product Citations</b>	1. Nomi K, <i>et al.</i> 2021. <i>Cell Reports.</i> 34(5):108715. <a href="#">PubMed</a> 2. Hua Y, <i>et al.</i> 2022. <i>Stem Cell Res Ther.</i> 13:223. <a href="#">PubMed</a> 3. Chung K, <i>et al.</i> 2014. <i>PLoS One.</i> 9:95304. <a href="#">PubMed</a> 4. Niwa A, <i>et al.</i> 2011. <i>PLoS One.</i> 6:e22261. <a href="#">PubMed</a>

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18. Wei X, *et al.* 2019. *Int J Mol Med*. 44:1425. [PubMed](#)
19. Wang G, *et al.* 2018. *Int J Mol Med*. 41:791. [PubMed](#)

**RRID** AB\_1089207 (BioLegend Cat. No. 330405)  
 AB\_1089206 (BioLegend Cat. No. 330406)

## Antigen Details

<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

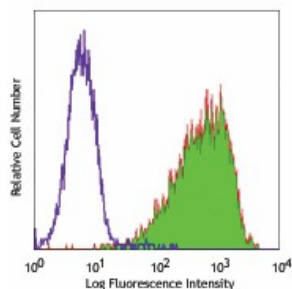
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

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



Human teratocarcinoma cell line, NCCIT, stained with MC-813-70 PE

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