

Alexa Fluor® 647 anti-human SSEA-4 Antibody

Catalog# / Size	330407 / 25 tests 330408 / 100 tests
Clone	MC-813-70
Regulatory Status	RUO
Other Names	Stage-Specific Embryonic Antigen-4, SSEA4
Isotype	Mouse IgG3, κ
Description	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

Verified Reactivity	Human
Reported Reactivity	Mouse, Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human embryonic carcinoma cell line 2102Ep
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA); may contain stabilizer.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 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® 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. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications (for the relevant formats) include: ELISA ¹ and immunohistochemistry ¹ of acetone-fixed frozen tissue sections and formalin-fixed paraffin-embedded sections.
Application References	1. Kannagi R, <i>et al.</i> 1983. <i>The EMBO J.</i> 2:2355
(PubMed link indicates BioLegend citation)	

Product Citations

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23. Pashos EE *et al.* 2017. Cell stem cell. 20(4):558-570 . [PubMed](#)
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)
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Antigen Details

Structure	Carbohydrate epitope on glycosphingolipids
Distribution	Human teratocarcinoma cells (EC), embryonic stem cells (ESC), embryonic germ cells (EG), preimplantation embryos, and erythrocytes; mouse oocytes, early cleaved embryos
Function	Regulation of differentiation
Cell Type	Embryonic Stem Cells, Mesenchymal Stem Cells, Neural Stem Cells
Biology Area	Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers, Stem Cells
Antigen References	<ol style="list-style-type: none">1. Kannagi R, <i>et al.</i> 1983. <i>The EMBO J.</i> 2:23552. Henderson JK, <i>et al.</i> 2002. <i>Stem Cells.</i> 20:3293. Brimble SN, <i>et al.</i> 2007. <i>Stem Cells.</i> 25:544. Battula VL, <i>et al.</i> 2007. <i>Differentiation.</i> 75:279
Gene ID	NA

Related Protocols

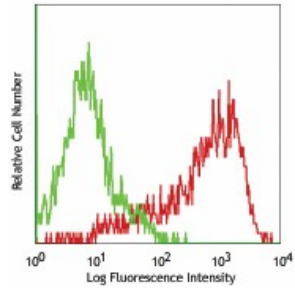
[Cell Surface Flow Cytometry Staining Protocol](#)

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

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



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