Human/Mouse SSEA-4 Antibody

Monoclonal Mouse IgG_3 Clone # MC-813-70

Catalog Number: MAB1435

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Recognizes a carbohydrate epitope of SSEA-4 (1, 2).
Source	Monoclonal Mouse IgG_3 Clone # MC-813-70
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	2120Ep human embryonal carcinoma cell line
Formulation	Lyophilized from a 0.2 µm filtered solution in MES with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

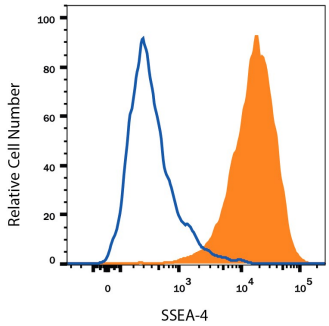
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10^6 cells	See Below
Immunocytochemistry	8-25 µg/mL	See Below

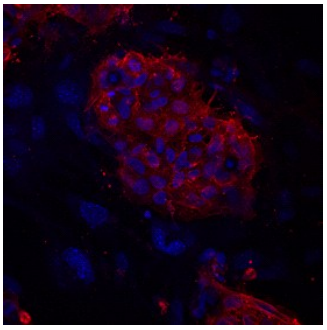
DATA

Flow Cytometry



Detection of SSEA-4 in NTera-2 Human Cell Line by Flow Cytometry. NTera-2 human testicular embryonic carcinoma cell line was stained with Mouse Anti-Human/Mouse SSEA-4 Monoclonal Antibody (Catalog # MAB1435, filled histogram) or isotype control antibody (Catalog # MAB007, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B).

Immunocytochemistry



SSEA-4 in BG01V Human Stem Cells. SSEA-4 was detected in immersion fixed BG01V human embryonic stem cells cultured on irradiated mouse embryonic fibroblasts (Catalog # PSC001) using 10 µg/mL Mouse Anti-Human/Mouse SSEA-4 Monoclonal Antibody (Catalog # MAB1435) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

SSEA-4 is expressed on the surface of human embryonal carcinoma (EC) cells (the pluripotent stem cells of teratocarcinomas), human embryonic germ cells (EG), and human embryonic stem cells (ES). Expression of SSEA-4 is down-regulated following differentiation of human EC cells. In contrast, the differentiation of murine EC and ES cells may be accompanied by an increase in SSEA-4 expression (1-4).

References:

1. Shevinsky, L.H. *et al.* (1982) Cell **30**:697.
2. Kannagi, R. *et al.* (1983) EMBO J. **2**:2355.
3. Thomson, J.A. and J.S. Odorico (2000) Trends Biotechnol. **18**:53.
4. Draper, J.S. *et al.* (2002) J. Anat. **200**:249.

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