

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Recognizes a carbohydrate epitope of SSEA-4 (1, 2).
<b>Source</b>	Monoclonal Mouse IgG <sub>3</sub> Clone # MC-813-70
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	2120Ep human embryonal carcinoma cell line
<b>Formulation</b>	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.

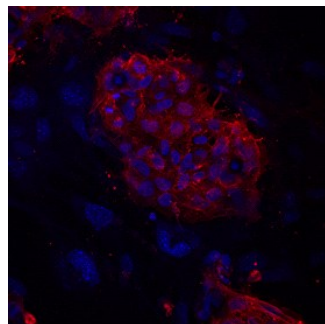
## APPLICATIONS

**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
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	Ntera-2 human testicular embryonic carcinoma cell line
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

## DATA

### 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 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

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.