

**DESCRIPTION**

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Recognizes a carbohydrate epitope of SSEA-3 (4, 5).
<b>Source</b>	Monoclonal Rat IgM Clone # MC-631
<b>Purification</b>	IgM-specific Affinity-purified from hybridoma culture supernatant
<b>Immunogen</b>	Four to eight cell stage mouse embryos
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

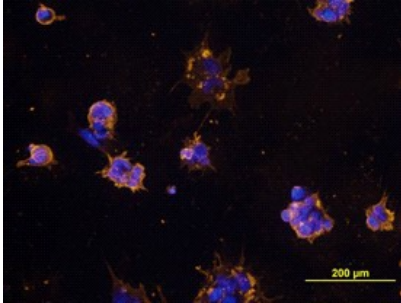
**APPLICATIONS**

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	D3 mouse embryonic stem cell line
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**

**Immunocytochemistry**



**SSEA-3 in BG01V Human Stem Cells.** SSEA-3 was detected in immersion fixed non-permeabilized BG01V human embryonic stem cells using Human/Mouse SSEA-3 Monoclonal Antibody (Catalog # MAB1434) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (yellow; Catalog # NL013) 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-3, also known as glycolipid GB5, is expressed on the surface of human teratocarcinoma stem cells (EC), human embryonic germ cells (EG), and human embryonic stem cells (ES) (1). Expression of SSEA-3 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-3 expression (2, 3).

**References:**

1. Zhou, D. *et al.* (2000) *J. Biol. Chem.* **275**:22631.
2. Thomson, J.A. and J.S. Odorico (2000) *Trends Biotechnol.* **18**:53.
3. Draper, J.S. *et al.* (2002) *J. Anat.* **200**:249.
4. Shevinsky, L.H. *et al.* (1982) *Cell* **30**:697.
5. Kannagi, R. *et al.* (1983) *EMBO J.* **2**:2355.