

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse SSEA-1.
<b>Source</b>	Monoclonal Mouse IgM Clone # MC-480
<b>Purification</b>	IgM-specific Affinity-purified from hybridoma culture supernatant
<b>Immunogen</b>	F9 mouse teratocarcinoma stem cells
<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.

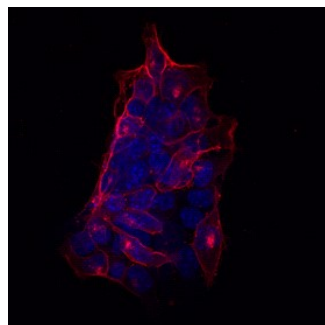
## APPLICATIONS

**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-reported</b>	Lujan, E. <i>et al.</i> (2015) <i>Nature</i> <b>521</b> : 352. Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Immunoprecipitation</b>	Ballou, B. <i>et al.</i> (1979) <i>Science</i> <b>206</b> :844.	

## DATA

### Immunocytochemistry



**SSEA-1 in D3 Mouse Cell Line.** SSEA-1 was detected in immersion fixed D3 mouse embryonic stem cell line using 10 µg/mL Human/Mouse SSEA-1 Monoclonal Antibody (Catalog # MAB2155) for 3 hours at room temperature. Cells were stained (red) 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

Stage-Specific Embryonic Antigen-1 (SSEA-1), an antigenic epitope defined as a Lewis x carbohydrate structure, is expressed during early mouse embryogenesis on murine embryonal carcinoma cells (EC), murine embryonic stem cells (ES), and murine and human germ cells. Expression of SSEA-1 is down-regulated following differentiation of murine EC and ES cells. In contrast, the differentiation of human EC and ES cells is accompanied by an increase in SSEA-1 expression (1, 2).

### References:

1. Solter, D. and Knowles, B.B. (1978) *Proc. Natl. Acad. Sci. USA* **75**:5565.
2. Fox, N. *et al.* (1983) *Cancer Res.* **43**:669.