

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 Tris and NaCl with BSA as a carrier protein. See Certificate of Analysis for details.

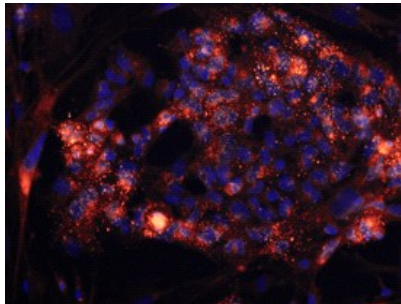
APPLICATIONS

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	2.5 µg/10 ⁶ cells	NTera-2 human testicular embryonic carcinoma cell line
Immunocytochemistry	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 Mouse Anti-Human/Mouse SSEA-4 Biotinylated Monoclonal Antibody (Catalog # BAM1435) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 567-conjugated Streptavidin (red; Catalog # NL999) 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.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 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.