# Anti-Human SSEA-4 Antibody, Clone MC-813-70, FITC

### **Antibodies**

Mouse monoclonal IgG3 antibody against human, mouse, rat SSEA-4,

FITC-conjugated

Catalog #60062FI #60062FI.1 100 Tests 5 μL/test 25 Tests 5 μL/test



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# **Product Description**

The MC-813-70 antibody reacts with stage-specific embryonic antigen-4 (SSEA-4), a glycolipid carbohydrate antigen expressed on the surface of human embryonal carcinoma (EC), embryonic germ (EG), undifferentiated embryonic stem (ES), and induced pluripotent stem (iPS) cells, a subset of mesenchymal stem cells, and rhesus monkey ES cell lines. No immunoreactivity is evident with undifferentiated mouse EC, EG, ES, and iPS cells. Expression of SSEA-4 is down-regulated following differentiation of human EC, ES, and iPS cells. In contrast, the differentiation of mouse EC, ES, and iPS cells may be accompanied by an increase in SSEA-4 expression.

Target Antigen Name: SSEA-4

Alternative Names: Stage-specific embryonic antigen-4

Gene ID: 330401

Species Reactivity: Human, Mouse, Rat, Rhesus, Cat, Chicken, Dog, Rabbit

Host Species:MouseClonality:MonoclonalClone:MC-813-70Isotype:IgG3, kappa

Immunogen: Human embryonal carcinoma cell line 2102Ep

Conjugate: FITC (Fluorescein isothiocyanate)

# **Applications**

Verified: FC Reported: FC

Special Applications: This antibody clone has been verified for labeling human ES and iPS cells grown in TeSR™-E8™

(Catalog #05940), mTeSR™1 (Catalog #85850), and TeSR™2 (Catalog #05860).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

# **Properties**

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin

Purification: The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The

solution is free of unconjugated FITC.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to

light. For product expiry date, please contact techsupport@stemcell.com.

Directions for Use: For flow cytometry, the suggested use of this antibody is 5 µL per 1 x 10^6 cells in 100 µL or per 100 µL of

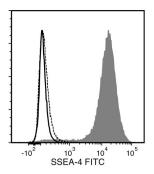
whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

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#### Data



Flow cytometry analysis of human ES cells (filled histogram) or HT1080 fibrosarcoma cells (negative control; dashed line histogram) labeled with Anti-Human SSEA-4 Antibody, Clone MC-813-70, FITC. Labeling of human ES cells with a mouse IgG3, kappa FITC isotype control antibody is shown (solid line histogram).

#### Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

#### References

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- 8. Thomson JA et al. (1995) Isolation of a primate embryonic stem cell line. Proc Natl Acad Sci USA 92(17): 7844–8. (IHC)
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