Antibodies

Anti-Human SSEA-4 Antibody, Clone MC-813-70, Biotin

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

Catalog #60062BT

100 µg 0.5 mg/mL

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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
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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:	Mouse
Clonality:	Monoclonal
Clone:	MC-813-70
Isotype:	IgG3, kappa
Immunogen:	Human embryonal carcinoma cell line 2102Ep
Conjugate:	Biotin

Applications

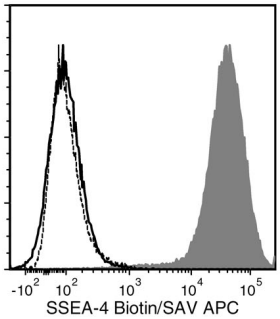
Verified:	FC
Reported:	FC, ICC, IF
Special Applications:	This antibody clone has been verified for labeling human ES and iPS cells grown in TeSR™-E8™ (Catalog #05940), mTeSR™1 (Catalog #05850) and TeSR™2 (Catalog #05860), and has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human ES/iPS Cell TRA-1-60 Positive Selection Kit (Catalog #18166) and EasySep™ hESC/hiPSC SSEA-4 Positive Selection Kit (Catalog #18165; partial blocking may be observed).

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
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 0.125 µg per 1 x 10^6 cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

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, Biotin, followed by streptavidin (SAV) APC. Labeling of human ES cells with a mouse IgG3, kappa biotin isotype control antibody, followed by SAV APC 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, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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