

## Antibodies

Catalog #60062BT

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

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

100 µg 0.5 mg/mL



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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

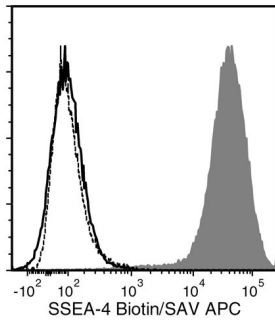
Verified:	FC
Reported:	FC, ICC, IF
Special Applications:	This antibody clone has been verified for labeling human ES and iPS cells grown in TeSR™-E8™ (Catalog #05940), mTeSR™1 (Catalog #05850) and TeSR™2 (Catalog #05860), and has been verified for purity assessments of cells isolated with EasySep™ kits, 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 $\leq 0.125$ µg per $1 \times 10^6$ 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](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

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