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

Antibodies

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

Catalog	#60062PE	100 Tests	5 µL/test
	#60062PE.1	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, or 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:	PE (Phycoerythrin)

Applications

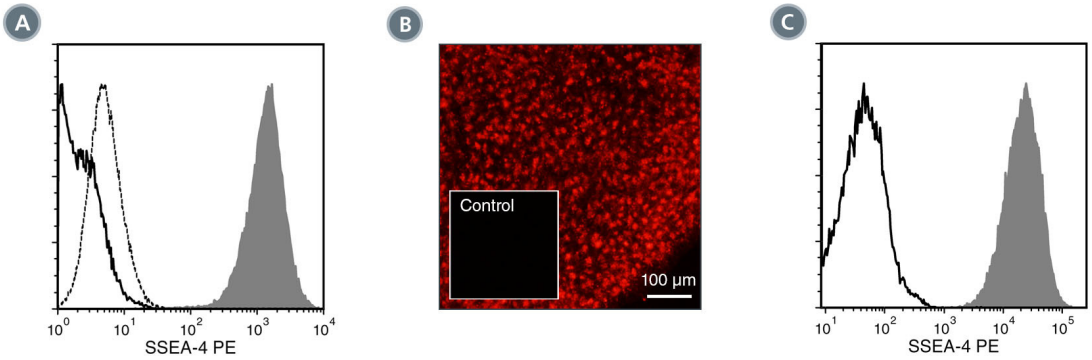
Verified:	FC, ICC, IF
Reported:	FC
Special Applications:	This antibody clone has been verified for labeling human ES and iPS cells grown in TeSR™-E8™ (Catalog #05940), mTeSR™1 (Catalog #85850), and TeSR™2 (Catalog #05860).

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 PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
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:	The suggested use of this antibody is: FC, 5 µL per 1 x 10^6 cells in 100 µL; ICC/IF, 100X dilution. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) 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, PE. Labeling of human ES cells with a mouse IgG3, kappa PE isotype control antibody is shown (solid line histogram).
(B) Human ES cells were cultured in mTeSR™1 on Corning® Matrigel®-coated glass slides, then fixed and labeled with Anti-Human SSEA-4 Antibody, Clone MC-813-70, PE. Inset shows cells labeled with a mouse IgG3, kappa, PE isotype control antibody.
(C) Flow cytometry analysis of human iPS cells labeled with Anti-Human SSEA-4 Antibody, Clone MC-813-70, PE (filled histogram) or a mouse IgG3, kappa PE isotype control antibody (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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