Antibodies

Anti-Mouse SSEA-3 Antibody, Clone MC-631, Alexa Fluor® 488

Rat monoclonal IgM antibody against human, mouse, rat SSEA-3, Alexa Fluor® 488-conjugated

Catalog	#60061AD	100 tests	5 µL/test
	#60061AD.1	25 tests	5 µL/test

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Product Description

The MC-631 antibody reacts with a galactosylgloboside epitope on the stage-specific embryonic antigen-3 (SSEA-3), which is expressed on the surface of human embryonal carcinoma (EC), embryonic germ (EG), undifferentiated embryonic stem (ES), and induced pluripotent stem (iPS) cells, as well as rhesus monkey ES cell lines. No immunoreactivity is evident with undifferentiated mouse EC, EG and ES cells. Expression of SSEA-3 is down regulated following differentiation of ES and EC cells. In contrast, the differentiation of mouse ES and EC cells may be accompanied by an increase in SSEA-3 expression.

Target Antigen Name:	SSEA-3
Alternative Names:	Stage-specific embryonic antigen-3
Gene ID:	93961
Species Reactivity:	Human, Mouse, Rat, Rhesus
Host Species:	Rat (F344)
Clonality:	Monoclonal
Clone:	MC-631
Isotype:	IgM, kappa
Immunogen:	Four to eight-cell stage mouse embryos
Conjugate:	Alexa Fluor® 488

Applications

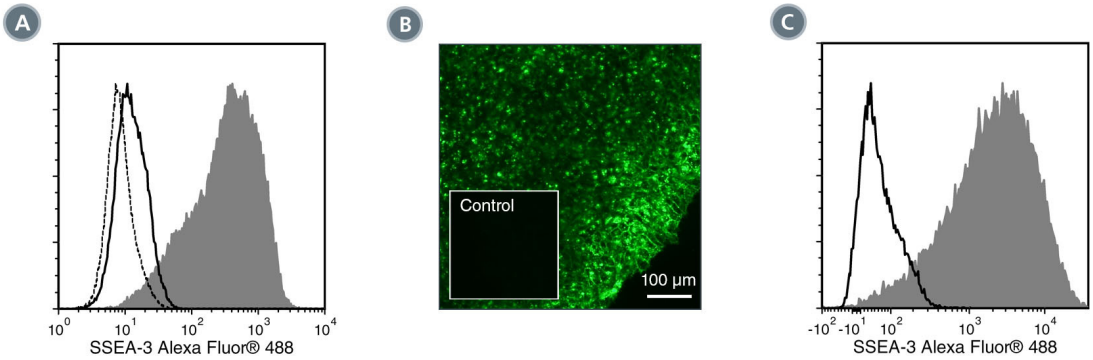
Verified:	FC, ICC, IF
Reported:	FC
Special Applications:	This antibody clone has been verified for labeling human ES and iPS cells grown in TeSR™-E8™ (Catalog #05940), mTeSR™1 (Catalog #05850) and TeSR™2 (Catalog #05860) and has been verified for purity assessments of cells isolated with EasySep™ kits,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

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; 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 Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.
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 10e6 cells in 100 µL volume or per 100 µL of whole blood; ICC/IF, 100X dilution. It is recommended that the antibody be titrated for optimal perfomance 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-Mouse SSEA-3 Antibody, Clone MC-631, Alexa Fluor® 488. Labeling of human ES cells with a rat IgM, kappa Alexa Fluor® 488 isotype control antibody is shown (solid line histogram).
(B) Human ES cells were cultured in mTeSR™1 on BD Matrigel™-coated glass slides, then fixed and stained with Anti-Mouse SSEA-3 Antibody, Clone MC-631, Alexa Fluor® 488. Inset shows cells labeled with a rat IgM, kappa Alexa Fluor® 488 isotype control antibody.
(C) Flow cytometry analysis of human iPS cells labeled with Anti-Mouse SSEA-3 Antibody, Clone MC-631, Alexa Fluor® 488 (filled histogram) or a rat IgM, kappa Alexa Fluor® 488 isotype control antibody (open 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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3. Thomson JA, et al. Isolation of a primate embryonic stem cell line. Proc Natl Acad Sci USA 92(17): 7844-48, 1995 (IHC)
4. Andrews PW, et al. Comparitive analysis of cell surface antigens expressed by cell lines derived from human germ cell tumours. Int J Cancer 66(6): 806-16, 1996 (FC)
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