Anti-Mouse SSEA-3 Antibody, Clone MC-631, PE

Antibodies

Rat monoclonal IgM antibody against human, mouse, rat SSEA-3, PE-

conjugated

Catalog #60061PE #60061PE.1

100 tests 5 μ L/test 25 tests 5 μ L/test



Scientists Helping Scientists™ | www.stemcell.com

TOLL FREE PHONE 1800 667 0322 • PHONE +1604 877 0713
INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

FOR RESEARCH USE ONLY NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

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: 9396

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: PE

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 #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 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: For flow cytometry the suggested use of this antibody is 5 μ L per 1 x 10e6 cells in 100 μ L volume or per

100 µL of whole blood. It is recommended that the antibody be titrated for optimal performance for each

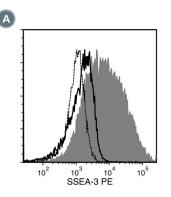
application.

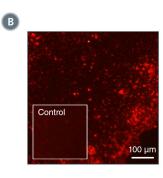
Anti-Mouse SSEA-3 Antibody, Clone MC-631, PE

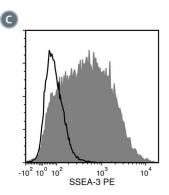
Antibodies



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, PE. Labeling of human ES cells with a rat IgM, 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 stained with Anti-Mouse SSEA-3 Antibody, Clone MC-631, PE. Inset shows cells labeled with a rat IgM, kappa PE isotype control antibody.

(C) Flow cytometry analysis of human iPS cells labeled with Anti-Mouse SSEA-3 Antibody, Clone MC-631, PE (filled histogram) or a rat IgM, kappa PE 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

- 1. Andrews PW, et al. Cell surface antigens of a clonal human embryonic carcinoma cell line: morphological and antigenic differentiation in culture. Int J Cancer 29(5): 523-31, 1982
- 2. Kannagi R, et al. Stage-specific embryonic antigens (SSEA-3 and -4) are epitopes of a unique globo-series ganglioside isolated from human teratocarcinoma cells. EMBO 2(12): 2355-61, 1983
- 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)
- 5. Draper JS, et al. Surface antigens of human embryonic stem cells: changes upon differentiation in culture. J Anat 200(3): 249-58, 2002 (FC)
- 6. Henderson JK, et al. Preimplantation human embryos and embryonic stem cells show comparable expression of stage-specific embryonic antigens. Stem Cells 20(4): 329-37, 2002 (FC, IF)
- 7. Ueda S, et al. Establishment of rat embryonic stem cells and making of chimera rats. PLoS One 3(7): e2800, 2008 (IF)

Copyright © 2014 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists and EasySep are trademarks of STEMCELL Technologies Inc. TeSR, E8 and mTeSR are trademarks of WARF. Matrigel is a trademark of Corning® Incorporated. All other trademarks are the property of their respective holders. Alexa Fluor® is a registered trademark of Life Technologies Corporation. This product is licensed for internal research use only and its sale is expressly conditioned on the buyer not using it for manufacturing, performing a service, or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485 MEDICAL DEVICE STANDARDS.