Anti-Human SSEA-5 Antibody, Clone 8e11

Antibodies

Mouse monoclonal IgG1 antibody against human SSEA-5, unconjugated

Catalog #60063	200 µg	0.5 mg/mL
#60063.1	50 µg	0.5 mg/mL

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Product Description

The 8e11 antibody reacts with Stage-Specific Embryonic Antigen-5 (SSEA-5), a terminal H type-1 glycan (Fuc1-2Galβ1-3GlcNAcβ1) expressed on the surface of cells in the inner cell mass of the human blastocyst during embryogenesis, and on undifferentiated human embryonic stem (ES) and induced pluripotent stem (iPS) cells. Expression of SSEA-5 is rapidly down-regulated upon cellular differentiation. The 8e11 antibody can be used in conjunction with other pluripotency surface markers such as CD9 and CD90, or CD50 and CD200, to sort and remove undifferentiated teratoma-forming cells from incompletely differentiated stem cell cultures.

Target Antigen Name:	SSEA-5
Alternative Names:	Stage-specific embryonic antigen-5
Gene ID:	Not Applicable
Species Reactivity:	Human
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	8e11
Isotype:	IgG1, kappa
Immunogen:	Undifferentiated H9 human embryonic stem cells
Conjugate:	Unconjugated

Applications

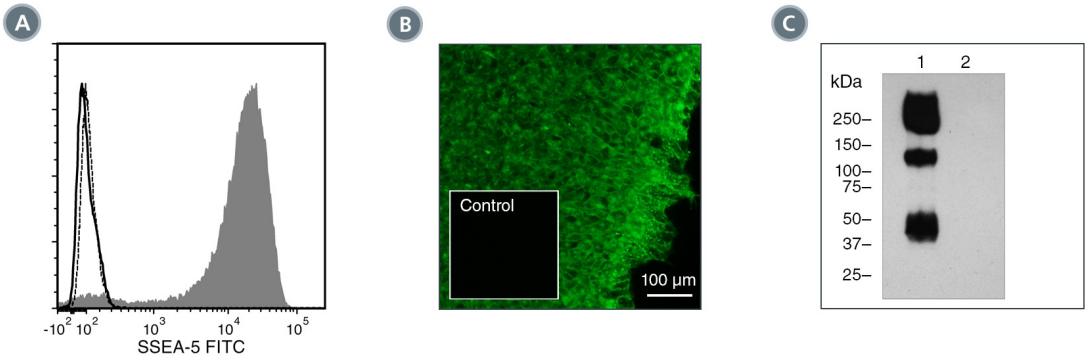
Verified:	FC, ICC, IF, WB
Reported:	FC, ICC, IF, IHC, IP, WB
Special Applications:	This antibody clone has been verified for labeling human ES and iPS cells grown in TeSR™-E8™ (Catalog #05940), mTeSR™1 (Catalog #05850) and TeSR™2 (Catalog #05860).

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
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please request a lot-specific Certificate of Analysis from techsupport@stemcell.com.
Directions for Use:	The suggested use of this antibody is: FC, ≤ 1 µg per 1 x 10e6 cells in 100 µL volume; ICC/IF, ≤ 2 µg/mL; WB, ≤ 2 µg/mL. 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-5 Antibody, Clone 8e11, followed by goat anti-mouse IgG, FITC. Labeling of human ES cells with a mouse IgG1, kappa isotype control antibody followed by goat anti-mouse IgG, FITC 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-Human SSEA-5 Antibody, Clone 8e11, followed by goat anti-mouse IgG, FITC. Inset shows cells labeled with a mouse IgG1, kappa isotype control antibody followed by goat anti-mouse IgG, FITC.
(C) Western blot analysis of denatured/reduced cell lysates from human ES cells (lane 1) or HT1080 fibrosarcoma cells (lane 2) with Anti-Human SSEA-5 Antibody, Clone 8e11.

Related Products

PRODUCT NAME	CATALOG #	SIZE
Anti-Human SSEA-5 Antibody, Clone 8e11	60063	200 µg
Anti-Human SSEA-5 Antibody, Clone 8e11	60063.1	50 µg
Anti-Human SSEA-5 Antibody, Clone 8e11, FITC	60063FI	100 tests
Anti-Human SSEA-5 Antibody, Clone 8e11, FITC	60063FI.1	25 tests

References

1. Andrews PW. Toward safer regenerative medicine. Nat Biotechnol 29(9):803-05, 2011
2. Tang C, et al. An antibody against SSEA-5 glycan on human pluripotent stem cells enables removal of teratoma-forming cells. Nat Biotechnol 29(9): 829-34, 2011 (Depletion, FC, IF, IHC, IP)
3. Itskovitz-Eldor, J. A panel of glycan cell surface markers define pluripotency state and promote safer cell-based therapies. Cell Stem Cell 9(4): 291-92, 2011