Anti-Human SSEA-5 Antibody, Clone 8e11, PE

Antibodies

Mouse monoclonal IgG1 antibody against human SSEA-5, PE-conjugated

Catalog	#60063PE	100 Tests	5 µL/test
	#60063PE.1	25 Tests	5 µL/test

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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:	PE

Applications

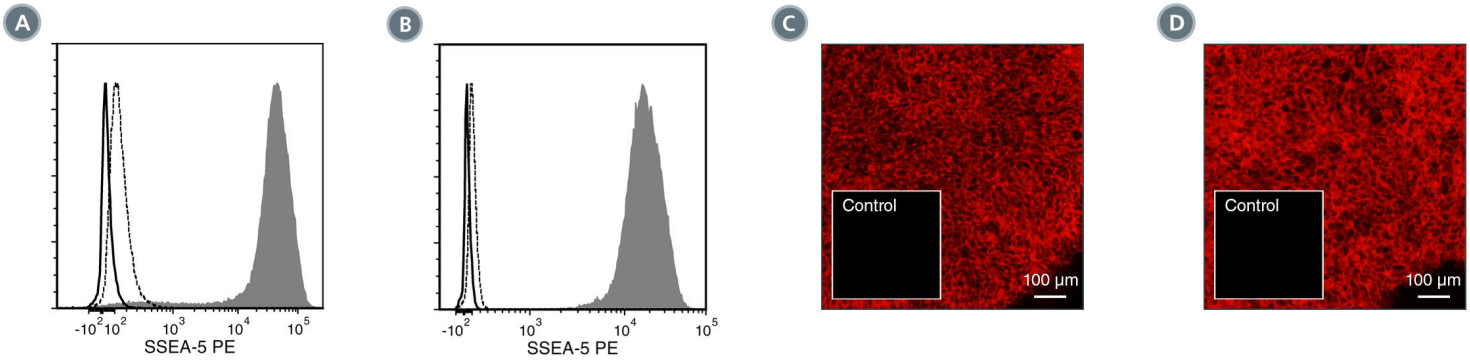
Verified:	FC, ICC, IF
Reported:	FC
Special Applications:	This antibody clone has been verified for labeling human ES and iPS cells grown in TeSR™-E8™ (Catalog #05940), mTeSR™1 (Catalog #05850) and TeSR™2 (Catalog #05860), and for purity assessments of cells isolated with EasySep™ kits, including EasySep™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

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; 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 volume; 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-5 Antibody, Clone 8e11, PE. Labeling of human ES cells with a mouse IgG1, kappa PE isotype control antibody is shown (solid line histogram).
(B) Flow cytometry analysis of human iPS cells (filled histogram) or HT1080 fibrosarcoma cells (negative control; dashed line histogram) labeled with Anti-Human SSEA-5 Antibody, Clone 8e11, PE. Labeling of human iPS cells with a mouse IgG1, kappa PE isotype control antibody is shown (solid line histogram).
(C) Human ES cells were cultured in mTeSR™1 on Corning® Matrigel®-coated glass coverslips, then fixed and labeled with Anti-Human SSEA-5 Antibody, Clone 8e11, PE. Inset shows labeling of human ES cells with a mouse IgG1, kappa PE isotype control antibody.
(D) Human iPS cells were cultured in mTeSR™1 on Corning® Matrigel®-coated glass coverslips, then fixed and labeled with Anti-Human SSEA-5 Antibody, Clone 8e11, PE. Inset shows labeling of human iPS cells with a mouse IgG1, kappa PE isotype control antibody.

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