

Technical Data Sheet

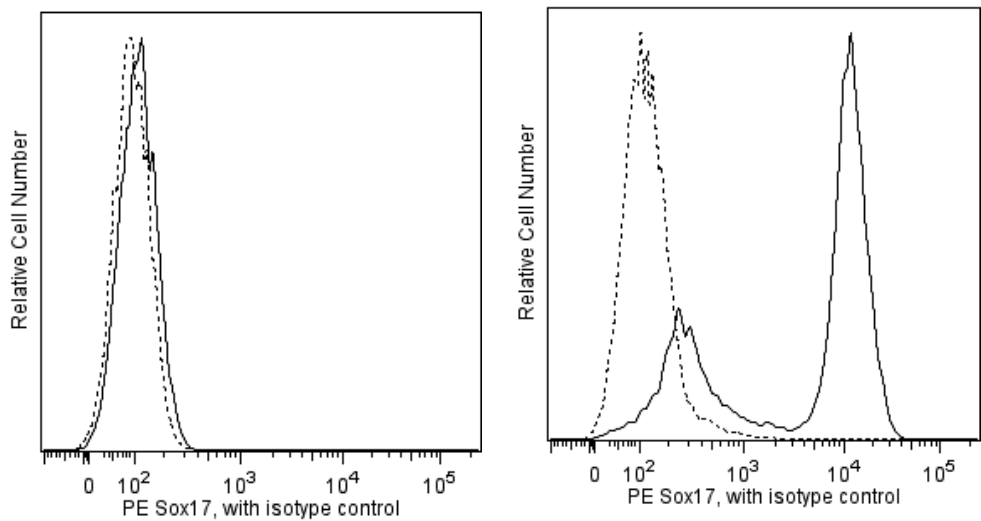
PE Mouse anti-Human Sox17

Product Information

Material Number:	561591
Alternate Name:	SOX-17, SOX17, FLJ22252
Entrez Gene ID:	64321
Size:	50 tests
Vol. per Test:	5 µl
Clone:	P7-969
Immunogen:	Human Sox17 Recombinant Protein
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Tested: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The P7-969 monoclonal antibody reacts with human Sox17, a member of the SOX (SRY-related HMG-box) family of transcription factors. SOX family members contain a DNA binding domain (HMG-box) and are involved in the control of development. Sox17 is expressed in primitive and definitive endoderm and regulates fetal and neonatal hematopoietic stem cell proliferation.



Flow cytometric analysis of Sox17 in definitive endoderm derived from human embryonic stem (ES) cells. H9 human ES cells (WiCell, Madison, WI) grown on an irradiated mouse embryonic feeder layer were differentiated to definitive endoderm for 3 days (D'Amour et al, 2005) in RPMI medium supplemented with 0.5% FBS, 1× L-glutamine, and 100 ng/ml Activin A (R&D Systems). Control ES cells (left panel) and day-3 differentiated cells (right panel) were fixed with BD Cytofix buffer (Cat. No. 554655) and permeabilized with BD™ Phosflow Perm buffer III (Cat. No. 558050). The cells were stained with either PE Mouse IgG1, κ isotype control (dashed lines, Cat. No. 554680) or PE Mouse Anti-human Sox17 antibody (solid lines) at matched concentrations. The histograms were derived from gated events based on light scattering characteristics of the human ES and H9-derived endoderm cells, respectively. Flow cytometry was performed on a BD LSR™ II flow cytometry system.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Intracellular staining (flow cytometry)	Routinely Tested
---	------------------

Suggested Companion Products

Catalog Number	Name	Size	Clone
554655	Fixation Buffer	100 ml	(none)
558050	Perm Buffer III	125 ml	(none)
554680	PE Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
554656	Stain Buffer (FBS)	500 ml	(none)

BD Biosciences

bdbiosciences.com				
United States	Canada	Europe	Japan	Asia Pacific
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633
Latin America/Caribbean				
55.11.5185.9995				

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD



Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

D'Amour KA, Agulnick AD, Eliazar S, Kelly OG, Kroon E, Baetge EE. Efficient differentiation of human embryonic stem cells to definitive endoderm. *Nat Biotechnol.* 2005; 23(12):1534-1541. (Methodology: Cell differentiation)

Katoh M. Molecular cloning and characterization of human SOX17. *Int J Mol Med.* 2002; 9(2):153-157. (Biology)

Kim I, Saunders TL, Morrison SJ. Sox17 dependence distinguishes the transcriptional regulation of fetal from adult hematopoietic stem cells. *Cell.* 2007; 130(3):470-483. (Biology)

Séguin CA, Draper JS, Nagy A, Rossant J. Establishment of endoderm progenitors by SOX transcription factor expression in human embryonic stem cells. *Cell Stem Cell.* 2008; 3(2):182-185. (Biology)

Serrano AG, Gandillet A, Pearson S, Lacaud G, Kouskoff V. Contrasting effects of Sox17- and Sox18-sustained expression at the onset of blood specification. *Blood.* 2010; 115(19):3895-3898. (Biology)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD

