Datasheet for ABIN967681

anti-SOX17 antibody

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Overview

Quantity:	0.1 mg
Target:	SOX17
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SOX17 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), BioImaging (BI), Intracellular Staining (ICS)

Product Details

Brand:	BD Pharmingen™
Immunogen:	Human Sox17 Recombinant Protein
Clone:	P7-969
Isotype:	IgG1 kappa
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. An isotype control should be used at the same concentration as the antibody of interest. 3. Please refer to us for technical protocols. 4. 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. 5. Sodium azide is a reversible inhibitor of oxidative metabolism, therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected

Product Details

	into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use. 6. Triton is a trademark of the Dow Chemical Company.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	SOX17
Alternative Name:	SOX17 (SOX17 Products)
Background:	The P7-969 monoclonal antibody reacts with human Sox17, a member of the SOX (SRY-releated 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. Synonyms: SOX-17, SOX17, FLJ22252
Molecular Weight:	45 kDa
Gene ID:	64321

Application Details

Comment:	Related Products: ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

Publications

Product cited in:

Serrano, Gandillet, Pearson, Lacaud, Kouskoff: "Contrasting effects of Sox17- and Sox18-sustained expression at the onset of blood specification." in: **Blood**, Vol. 115, Issue 19, pp. 3895-8, (2010) (PubMed).

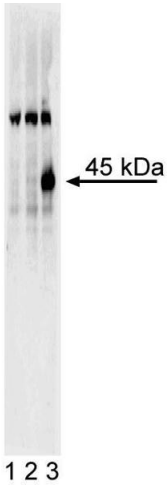
Séguin, Draper, Nagy, Rossant: "Establishment of endoderm progenitors by SOX transcription factor expression in human embryonic stem cells." in: **Cell stem cell**, Vol. 3, Issue 2, pp. 182-95, (2008) (PubMed).

Kim, Saunders, Morrison: "Sox17 dependence distinguishes the transcriptional regulation of fetal from adult hematopoietic stem cells." in: **Cell**, Vol. 130, Issue 3, pp. 470-83, (2007) (PubMed).

DAmour, Agulnick, Eliazer, Kelly, Kroon, Baetge: "Efficient differentiation of human embryonic stem cells to definitive endoderm." in: **Nature biotechnology**, Vol. 23, Issue 12, pp. 1534-41, (2005) (PubMed).

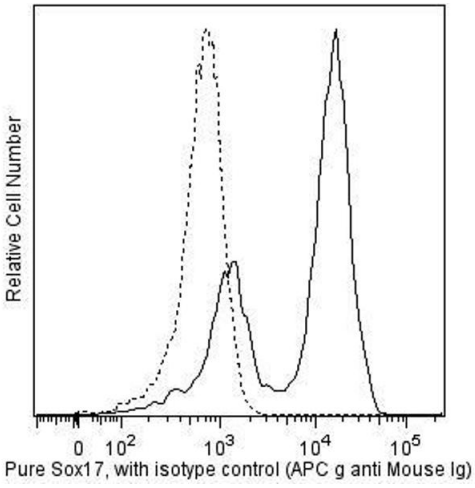
Collet, Secombes: "Construction and analysis of a secreting expression vector for fish cells." in: **Vaccine**, Vol. 23, Issue 13, pp. 1534-9, (2005) (PubMed).

There are more publications referencing this product on: Product page



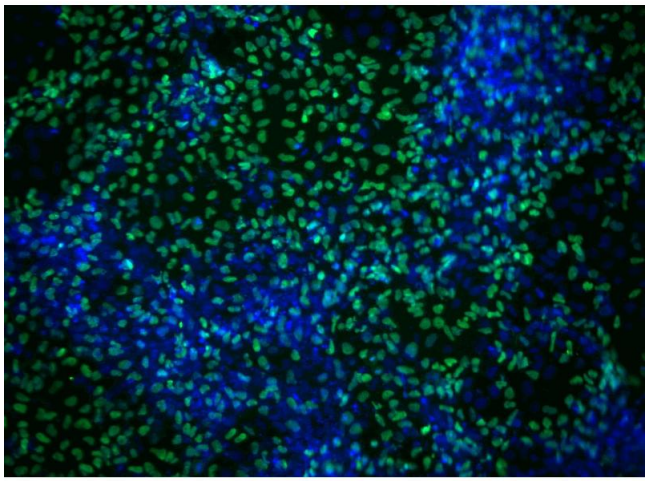
Western Blotting

Image 1. Western blot analysis of Sox17 in definitive endoderm derived from human embryonic stem (ES) cells. H9 human ES cells (WiCell, Madison, WI) 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). Lysates from control ES cells (lane 1) and from day 1 (lane 2) and day 3 (lane 3) differentiated cells were probed with Purified Mouse anti-Human Sox17 antibody at 1.0 µg/ml. The presence of Sox17 is demonstrated by the 45-kDa band in human ES-derived definitive endodermal cells (Lane 3), which is absent in H9 human ES cells (Lane 1) and at day 1 of differentiation (Lane 2). Purified Mouse anti-Hsp90 monoclonal antibody (ABIN967957) was used as a gel-loading control (MW 90 kDa).



Flow Cytometry

Image 2. 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). Day-3 differentiated cells were fixed with BD Cytofix buffer and permeabilized with BD™ Phosflow Perm buffer III. The cells were stained with either Purified Mouse IgG1, kappa isotype control (dashed line) or Purified Mouse Anti-human Sox17 antibody (solid line) at matched concentrations. The second-step reagent was APC goat anti-mouse Ig. The histograms were derived from gated events based on light scattering characteristics of the H9-derived endoderm cells. Flow cytometry was performed on a BD LSR™ II flow cytometry system.



Immunofluorescence

Image 3. Immunofluorescent staining of Sox17 in definitive endoderm derived from human embryonic stem (ES) cells. H9 human ES cells (WiCell, Madison, WI) passage 35 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). The cells were fixed with BD Cytofix buffer, permeabilized with 0.1% Triton™ X-100, and stained with Purified Mouse anti-Human Sox17 monoclonal antibody (pseudo-colored green) at 1.2 µg/mL. The second-step reagent was Alexa Fluor® 488 goat anti-mouse Ig (Life Technologies), and counter staining was with Hoechst 33342 (pseudo-colored blue). The image was captured on a BD Pathway™ 435 Cell Analyzer and merged using BD Attovision™ Software.