Alexa Fluor® 647 anti-SOX17 Recombinant Antibody (for IHC and ICC)

Catalog# / Size	628159 / 25 µg 628160 / 100 µg
Clone	O92B6.Rec
Regulatory Status	RUO
Other Names	Transcription factor SOX17, Transcription factor SOX 17, Transcription factor SOX-17, VUR3, SRY-Box17, SRY-Related HMG-Box Transcription Factor 17
Isotype	Mouse IgG1, κ
Description	SOX17 is an important member of the SOX family of transcription factors, which are defined by possession of a homologous sequence called the HMG (high mobility group) box. SOX genes are primarily involved in developmental processes including germ layer formation, cell-type specification, and organogenesis. SOX17 activates endodermal target genes, and is required for the formation of endoderm and blood vessel endothelium. SOX17 also plays critical roles in the maintenance of fetal and neonatal hematopoietic stem cells. Additionally, SOX17 is a regulator of human primordial germ cell fate. SOX17 also acts as a tumor suppressor through suppression of Wnt signaling, and a reduction of SOX17 expression is found in gastrointestinal and colon carcinomas. Additionally, mutations in SOX17 can induce stem-like characteristics in tumor cells by causing SOX17 to dimerize with OCT4 and induce pluripotency transcriptional programs.

Product Details

Verified Reactivity	Human
Antibody Type	Recombinant
Host Species	Mouse
Immunogen	Recombinant protein expressed in E. Coli corresponding to residues 177-414 of human SOX17
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	IHC-P - Quality tested ICC - Verified
Recommended Usage	Each lot of this antibody is quality control tested by formalin-fixed paraffin-embedded immunohistochemical staining. For immunohistochemistry, a concentration range of 5.0 - 10.0 µg/mL is suggested. For immunocytochemistry, a concentration range of 5.0 - 10.0 µg/mL is recommended. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Application Notes	This antibody (clone O92B6.Rec) does not cross-react with mouse SOX17 in western blot (WB). For immunohistochemistry (IHC), we recommend antigen retrieval with either Tris-EDTA (10 mM Tris, 1 mM EDTA, 0.05% Tween-20, pH 9.0) or Sodium Citrate (Cat. No. 928502). For immunocytochemistry (ICC), we recommend fixation with Fixation Buffer (Cat. No. 420801)

followed by permeabilization with either 100% ice-cold methanol or 0.5% Triton-X. Fixation and permeabilization with 100% ice-cold methanol alone is not recommended.

RRID

AB_3675168 (BioLegend Cat. No. 628159)
AB_3675168 (BioLegend Cat. No. 628160)

Antigen Details

Structure

SOX17 is a 414 amino acid protein with a predicted molecular weight of 44.1 kD.

Distribution

Nucleus

Function

Transcription factor

Interaction

Interacts with CTNNB1, LEF1, TCF4

Biology Area

Cell Biology, Signal Transduction, Transcription Factors

Antigen References

1. Wegner M. 1999. *Nucleic Acids Res*. 27:1409-20.
2. Du YC, *et al*. 2009. *Gastroenterology.* 137:1346-57.
3. Zorn AM, *et al*. 1999. *Mol Cell*. 4:487-98.
4. Sinner D, *et al*. 2004. *Development*. 131:3069-80.
5. Hudson C, *et al*. 1997. *Cell*. 91:397-405.
6. Matsui T, *et al*. 2006. *J Cell Sci.* 119:3513-26.
7. Kim I, *et al*. 2007. *Cell*. 130:470-83.
8. Zhang W, *et al*. 2008. *Cancer Res*. 68:2764-72.
9. Tan DS, *et al*. 2020. *Semin Cancer Biol*. 67:65-73.
10. Irie N, *et al*. 2015. *Cell.* 160:253-68.

Gene ID

64321

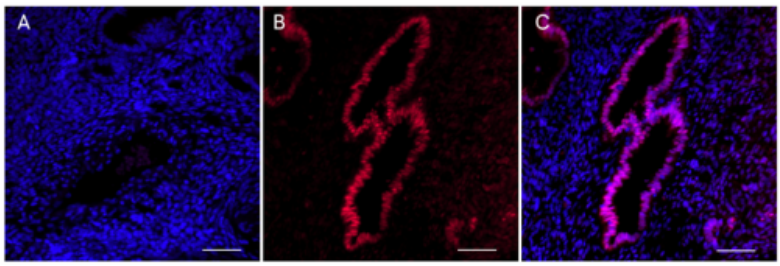
Related Protocols

- Immunocytochemistry Staining Protocol
- Immunohistochemistry Protocol for Paraffin-Embedded Sections

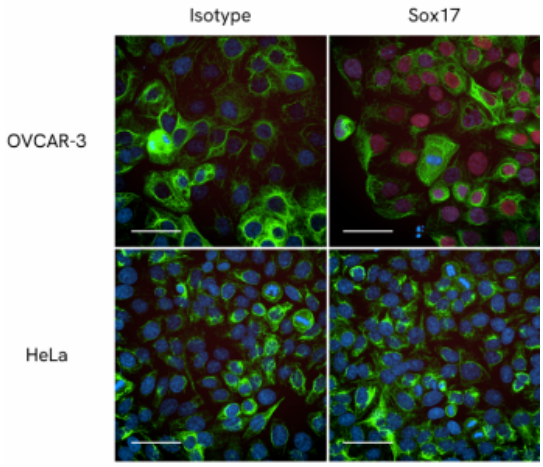
Other Formats

Purified anti-SOX17 Recombinant Antibody, Alexa Fluor® 647 anti-SOX17 Recombinant Antibody (For Flow Cytometry), Alexa Fluor® 647 anti-SOX17 Recombinant Antibody (for IHC and ICC), Alexa Fluor® 488 anti-SOX17 Recombinant Antibody

Product Data



IHC staining with Alexa Fluor® 647 anti-SOX17 was performed on formalin-fixed paraffin-embedded human endometrium tissue following antigen retrieval using Tris-EDTA pH 9.0 buffer (Cat. No. 422703). The tissue sections were incubated with Alexa Fluor® 647 mouse IgG1, κ isotype control (Cat. No. 400155) (panel A) or with Alexa Fluor® 647 anti-SOX17 Recombinant (clone O92B6.Rec) (panels B and C). Nuclei were counterstained with DAPI (Cat. No. 422801) (overlay in panels A and C). Scale Bar: 50 µm



OVCAR-3 cells (positive cell line, top panels), or HeLa cells (negative cell line, bottom panels) were fixed and permeabilized with 4% PFA and ice-cold methanol, and then intracellularly stained with Alexa Fluor® 674 anti-SOX17 Recombinant (clone O92B6.Rec) (right panels) or Alexa Fluor® 647 mouse IgG1, κ isotype control (Cat. No. 400155) (left panels). The cells were counterstained with DAPI (Cat. No. 422801) (blue) and Alexa Fluor® 488 anti-Cytokeratin (Cat. No. 628608) (green). The images were captured in a Revvity/Perkin Elmer Operetta CLS™ High Content Analysis System with a 63X objective. Scale bar 50 µm

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587