

SOX17 Antibody

Catalog # ASC11830

Product Information

Application	WB, IF, E
Primary Accession	Q9H6I2
Other Accession	NP_071899 , 11967991
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	44117
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SOX17 antibody can be used for detection of SOX17 by Western blot at 0.5 - 1 μ g/ml. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	64321
Other Names	Transcription factor SOX-17, SOX17
Target/Specificity	SOX17; SOX17 antibody is human, mouse and rat reactive. SOX17 is predicted to not cross-react with other SOX proteins.
Reconstitution & Storage	SOX17 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	SOX17 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SOX17
Function	Acts as a transcription regulator that binds target promoter DNA and bends the DNA. Binds to the sequences 5'-AACAAAT-3' or 5'- AACAAAG-3'. Modulates transcriptional regulation via WNT3A. Inhibits Wnt signaling. Promotes degradation of activated CTNNB1. Plays a key role in the regulation of embryonic development. Required for normal development of the definitive gut endoderm. Required for normal looping of the embryonic heart tube. Plays an important role in embryonic and postnatal vascular development, including development of arteries. Plays an important role in postnatal angiogenesis, where it is functionally redundant with SOX18. Required for the generation and maintenance of fetal hematopoietic stem cells, and for fetal hematopoiesis. Probable transcriptional activator in the premeiotic germ cells.

Cellular Location	Nucleus {ECO:0000255 PROSITE-ProRule:PRU00267}.
Tissue Location	Expressed in adult heart, lung, spleen, testis, ovary, placenta, fetal lung, and kidney. In normal gastrointestinal tract, it is preferentially expressed in esophagus, stomach and small intestine than in colon and rectum.

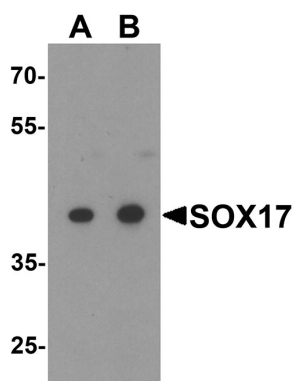
Background

SOX17 is a member of the SOX (SRY-related HMG-box) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate (1,2). SOX17 is part of the SoxF subgroup which plays an important role in the differentiation of different cell types, including visceral and definitive endoderm and hematopoietic cell types (3,4). SOX17 is also essential for acquisition and maintenance of arterial identity (5).

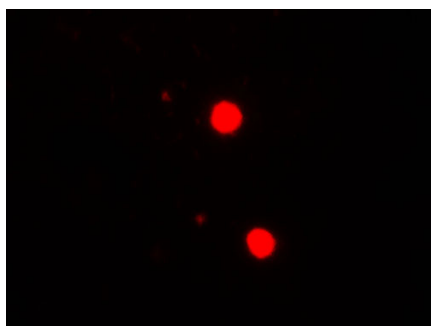
References

- Kanai Y, Kanai-Azuma M, Noce T, et al. Identification of two Sox17 messenger RNA isoforms, with and without the high mobility group box region, and their differential expression in mouse spermatogenesis. *J. Cell Biol.* 1996; 133:667-81.
- Jiang T, Hou CC, She ZY, et al. The SOX gene family: function and regulation in testis determination and male fertility maintenance. *Mol. Biol. Rep.* 2013; 40:2187-94.
- Francois M, Koopman P, and Beltrame M. SoxF genes: key players in the development of the cardiovascular system. *Int. J. Biochem. Cell Biol.* 2010; 42:445-8.
- Kim I, Saunders TL, and Morrison SJ. Sox17 dependence distinguishes the transcriptional regulation of fetal from adult hematopoietic stem cells. *Cell* 2007; 130:470-83.

Images



Western blot analysis of SOX17 in HepG2 cell lysate with SOX17 antibody at (A) 0.5 and (B) 1 µg/ml.



Immunofluorescence of SOX17 in mouse liver tissue with SOX17 antibody at 20 µg/ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.