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SOX18 Antibody

Catalog # ASC11831

Product Information

Application	WB, E
Primary Accession	P35713
Other Accession	NP_060889, 8924248
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	40891
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SOX18 antibody can be used for detection of SOX18 by Western blot at 1 - 2 g/ml.

Additional Information

Gene ID	54345
Other Names	Transcription factor SOX-18, SOX18
Target/Specificity	SOX18; SOX18 antibody is human, mouse and rat reactive. SOX18 is predicted to not cross-react with other SOX proteins.
Reconstitution & Storage	SOX18 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	SOX18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SOX18
Function	Transcriptional activator that binds to the consensus sequence 5'-AACAAAG-3' in the promoter of target genes and plays an essential role in embryonic cardiovascular development and lymphangiogenesis. Activates transcription of PROX1 and other genes coding for lymphatic endothelial markers. Plays an essential role in triggering the differentiation of lymph vessels, but is not required for the maintenance of differentiated lymphatic endothelial cells. Plays an important role in postnatal angiogenesis, where it is functionally redundant with SOX17. Interaction with MEF2C enhances transcriptional activation. Besides, required for normal hair development.
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00267}.

Tissue Location	Detected in heart, lung, placenta, skeletal muscle, liver, kidney, spleen, prostate, ovary, msosmall intestine and colon

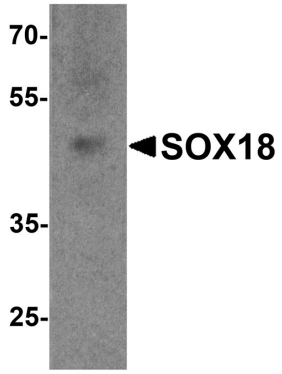
Background

SOX18 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). SOX18 is part of the SoxF subgroup which plays an important role in the differentiation of different cell types (3). SOX is known to be involved with vascularization and endothelial development, suggesting that it may be useful as a potential target for inhibiting tumor angiogenesis (4). Mutations in this gene have been associated with recessive and dominant forms of hypotrichosis-lymphedema-telangiectasia (5).

References

Dunn TL, Mynett-Johnson L, Wright EM, et al. Sequence and expression of Sox-18 encoding another HMG-box transcription factor. Gene 1995; 161:223-5.
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.
Young N, Hahn CN, Poh A, et al. Effect of disrupted SOX18 transcription factor function on tumor growth, vascularization, and endothelial development. J. Natl. Cancer Inst. 2006; 98:1060-7.

Images



Western blot analysis of SOX18 in 3T3 cell lysate with SOX18 antibody at 1 µg/ml.