

SOX18 Antibody

Catalog # ASC11831

Specification

SOX18 Antibody - Product Information

Application WB
Primary Accession P35713

Other Accession
Reactivity
Host
Clonality

NP_060889, 8924248
Human, Mouse, Rat
Rabbit
Polyclonal

lsotype IgG

Calculated MW Predicted: 42 kDa

Observed: 44 kDa KDa

Application Notes SOX18 antibody can be used for detection of SOX18 by Western blot at 1 - 2 μg/ml.

SOX18 Antibody - Additional Information

Gene ID **54345**

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°C for three months and -20°C, stable for up to one year.

Precautions

SOX18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SOX18 Antibody - 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



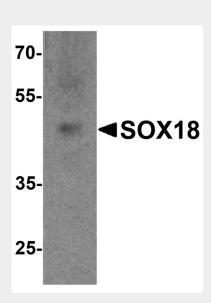
Detected in heart, lung, placenta, skeletal muscle, liver, kidney, spleen, prostate, ovary, msosmall intestine and colon

SOX18 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SOX18 Antibody - Images



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

SOX18 Antibody - Background

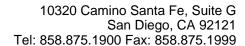
SOX18 is a member of the SOX (SRY-related HMG-box) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate (1,2). SOX18 is part of the SoxF subgroup which plays an important role in the differentiation of different cell types (3). SOX 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).

SOX18 Antibody - 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.