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SOX18 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16137a

Product Information

Application	IF, WB, E
Primary Accession	P35713
Other Accession	NP_060889.1
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	40891
Antigen Region	59-88

Additional Information

Gene ID	54345
Other Names	Transcription factor SOX-18, SOX18
Target/Specificity	This SOX18 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 59-88 amino acids from the N-terminal region of human SOX18.
Dilution	IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SOX18 Antibody (N-term) 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

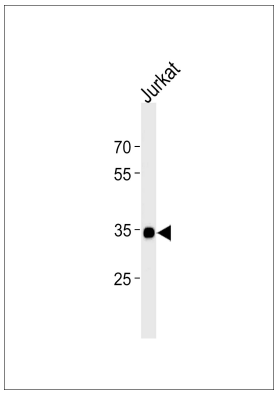
Background

This gene encodes 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 the cell fate. The encoded protein may act as a transcriptional regulator after forming a protein complex with other proteins. This protein plays a role in hair, blood vessel, and lymphatic vessel development. Mutations in this gene have been associated with recessive and dominant forms of hypotrichosis-lymphedema-telangiectasia.

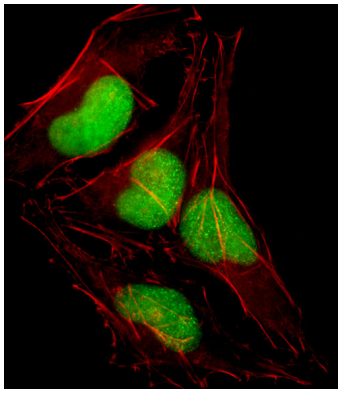
References

Petrovic, I., et al. Mol. Biol. Rep. 36(5):993-1000(2009)
Fontijn, R.D., et al. Am. J. Physiol. Heart Circ. Physiol. 294 (2), H891-H900 (2008) :
Ferrell, R.E., et al. Lymphat Res Biol 6(2):69-76(2008)
Finegold, D.N., et al. Lymphat Res Biol 6(2):65-68(2008)
Young, N., et al. J. Natl. Cancer Inst. 98(15):1060-1067(2006)

Images



SOX18 Antibody (N-term) (Cat. #AP16137a) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the SOX18 antibody detected the SOX18 protein (arrow).



Fluorescent confocal image of Hela cell stained with SOX18 Antibody (N-term)(Cat#AP16137a).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with SOX18 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min).SOX18 immunoreactivity is localized to Nucleus significantly.

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