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SOX4 Antibody

Catalog # ASC11902

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q06945
Other Accession	NP_003098, 4507163
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	47263
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SOX4 antibody can be used for detection of SOX4 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	6659
Other Names	Transcription factor SOX-4, SOX4
Target/Specificity	SOX4; SOX4 antibody is human, mouse and rat reactive.
Reconstitution & Storage	SOX4 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	SOX4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SOX4 {ECO:0000303|PubMed:8268656, ECO:0000312|HGNC:HGNC:11200}
Function	Transcriptional activator that binds with high affinity to the T-cell enhancer motif 5'-AACAAAG-3' motif (PubMed:30661772). Required for IL17A-producing Vgamma2-positive gamma-delta T-cell maturation and development, via binding to regulator loci of RORC to modulate expression (By similarity). Involved in skeletal myoblast differentiation by promoting gene expression of CALD1 (PubMed:26291311).
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00267, ECO:0000269|PubMed:16631117}
Tissue Location	Testis, brain, and heart.

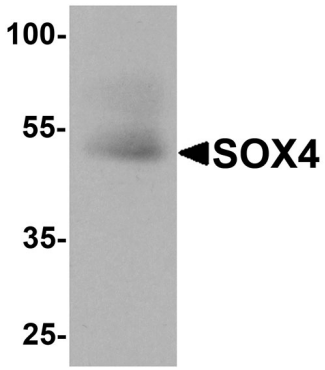
Background

SOX4 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 the cell fate (1,2). It may act as a transcriptional regulator after forming a protein complex with other proteins, such as syndecan binding protein (syntenin) (3). SOX4 contains one HMG box DNA-binding domain and may function in the apoptosis pathway leading to cell death. It has also been suggested to play a role in tumorigenesis and may mediate downstream effects of parathyroid hormone (PTH) and PTH-related protein (PTHrP) in bone development (4,5).

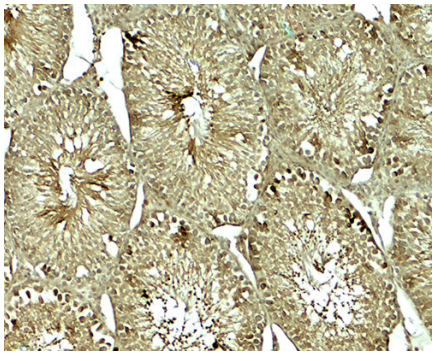
References

Wotton D, Lake RA, Farr CJ, et al. The high mobility group transcription factor, SOX4, transactivates the human CD2 enhancer. J. Biol. Chem. 1995; 270:7515-22.
Pan X, Li H, Zhang P, et al. Ubc9 interacts with SOX4 and represses its transcriptionalactivity. Biochem. Biophys. Res. Commun. 2006; 344:727-34.
Castillo SD, Matheu A, Mariani N, et al. Novel transcriptional targets of the SRY-HMG box transcription factor SOX4 link its expression to the development of small cell lung cancer. Cancer Res. 2012; 72:176-86.
Zhang H, Alberich-Jorda M, Amabile G, et al. Sox4 is a key oncogenic target in C/EBPa mutant acute myeloid leukemia. Cancer Cell 2013; 24:575-88.

Images

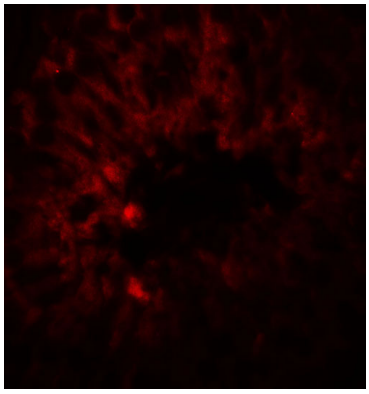


Western blot analysis of SOX4 in human testis tissue lysate with SOX4 antibody at 1 µg/ml.



Immunohistochemistry of SOX4 in rat testis tissue with SOX4 antibody at 5 µg/mL.

Immunofluorescence of SOX4 in rat testis tissue with SOX4 antibody at 20 µg/mL.



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