

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 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ 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°C for three months and -20°C, 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.

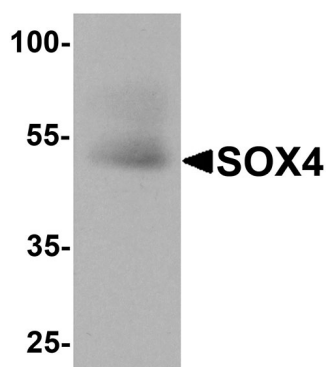
Background

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).

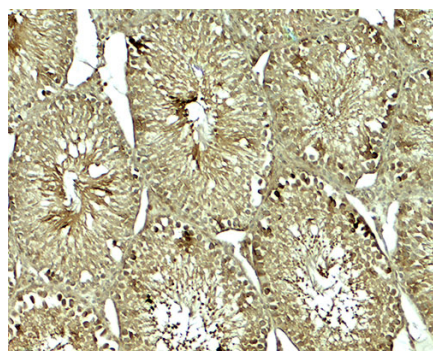
References

- 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 transcriptional activity. *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/EBP α mutant acute myeloid leukemia. *Cancer Cell* 2013; 24:575-88.

Images

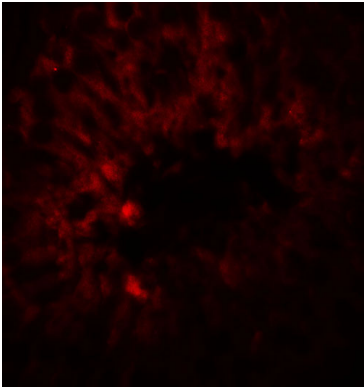


Western blot analysis of SOX4 in human testis tissue lysate with SOX4 antibody at 1 μ g/ml.



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

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



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