

SOX4 Antibody

Catalog # ASC11902

Specification

SOX4 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

Application Notes

WB, IHC-P, IF, E <u>Q06945</u> <u>NP_003098</u>, <u>4507163</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 52 kDa

Observed: 520 kDa KDa SOX4 antibody can be used for detection of SOX4 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.

SOX4 Antibody - Additional Information

Gene ID 6659 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.

SOX4 Antibody - 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}



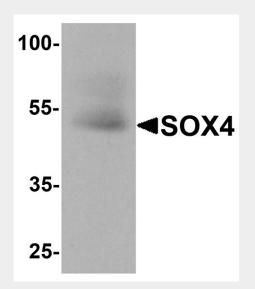
Tissue Location Testis, brain, and heart.

SOX4 Antibody - Protocols

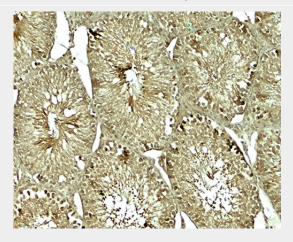
Provided below are standard protocols that you may find useful for product applications.

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

SOX4 Antibody - Images

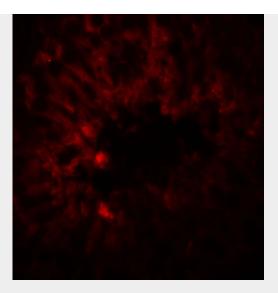


Western blot analysis of SOX4 in human testis tissue lysate with SOX4 antibody at 1 µg/ml.



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





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

SOX4 Antibody - 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).

SOX4 Antibody - 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.