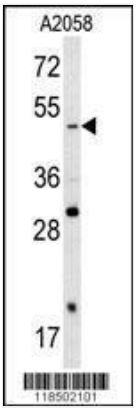
SOX4 Antibody – Rabbit Polyclonal

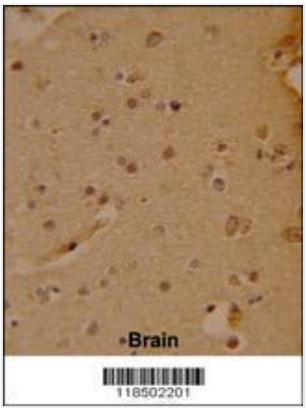
PRODUCT OVERVIEW

Product Name	SOX4, Polyclonal Antibody
Full Product Name	SOX4, NT (SOX4, Transcription factor SOX-4) (PE)
Product Gene Name	anti-SOX4 antibody
Product Synonym Names	SOX4; Transcription factor SOX-4
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with R-Phycoerythrin (PE).
Purity/Purification	Purified by saturated ammonium sulfate precipitation followed by dialysis against PBS.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: PE conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	Predicted: 52 kDa Observed: 520 kDa
OMIM	184430
3D Structure	ModBase 3D Structure for Q06945
Immunogen	SOX4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 93~122 amino acids from the N-terminal region of human SOX4.
Conjugate	PE
Note	Preservative Free
Product Categories/Family for anti-SOX4 antibody	Antibodies; Transcription Factors
Applications Tested/Suitable for anti-SOX4 antibody	Flow Cytometry (FC/FACS), ELISA (EIA), Immunohistochemistry (IHC), Western Blot (WB)
Application Notes for anti-SOX4 antibody	FC/FACS: 1:10-50 ELISA: 1:1,000 IHC: 1:50-100 WB: 1:50-100 Applications are based on unconjugated antibody.
Related Product Information for anti-SOX4 antibody	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. The protein may act as a transcriptional regulator after forming a protein complex with other proteins, such as syndecan binding protein (syntenin). The protein may function in the apoptosis pathway leading to cell death as well as to tumorigenesis and may mediate downstream effects of parathyroid hormone (PTH) and PTH-related protein (PTHrP) in bone development. The solution structure has been resolved for the HMG-box of a similar mouse protein.

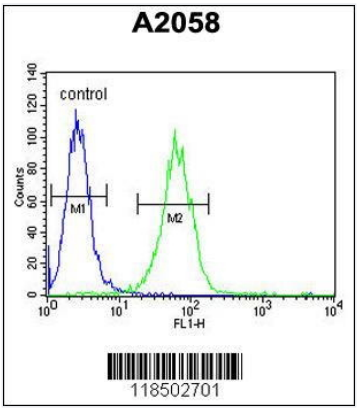
Product References and Citations for anti-SOX4 antibody	Farr C.J., Easty D.J.Mamm. Genome 4:577-584(1993) Pan X., Li H., Zhang P.Biochem. Biophys. Res. Commun. 344:727-734(2006).
Other Notes	Small volumes of anti-SOX4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for SOX4 purchase	MBS6350084 is an antibody targeting SOX4. Also known as SOX4, NT (SOX4, Transcription factor SOX-4) (PE). Reactive in Human. Host: Rabbit.



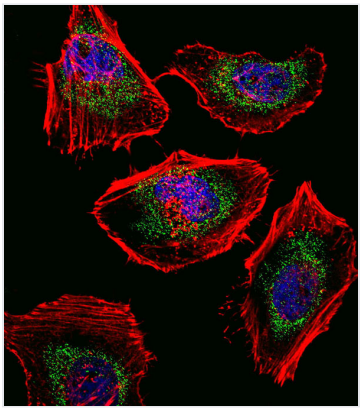
Western Blot (WB) of anti-SOX4 antibody
Western blot analysis of SOX4 antibody (N-term) in A2058 cell line lysates (35ug/lane). SOX4 (arrow) was detected using the purified Pab.



Immunohistochemistry (IHC) of anti-SOX4 antibody
Formalin-fixed and paraffin-embedded human brain reacted with SOX4 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow Cytometry (FC/FACS) of anti-SOX4 antibody
SOX4 Antibody (N-term) flow cytometric analysis of A2058 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Immunofluorescence (IF) of anti-SOX4 antibody
Fluorescent confocal image of Hela cell stained with SOX4 Antibody (N-term).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with SOX4 primary antibody (1:25, 1 h at 37 degree C). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37 degree C).Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37 degree C). Nuclei were counterstained with DAPI (blue) (10 ug/ml, 10 min). SOX4 immunoreactivity is localized to Mitochondria significantly and Nucleus weakly.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SOX4. It may not necessarily be applicable to this product.

NCBI GI #	4507163
NCBI GeneID	6659
NCBI Accession #	NP_003098
UniProt Primary Accession #	Q06945

UniProt Related Accession #	Q06945
GenBank Nucleotide #	NM_003107.2
NCBI Official Full Name	transcription factor SOX-4
NCBI Official Synonym Full Names	SRY (sex determining region Y)-box 4
NCBI Official Symbol	SOX4
NCBI Official Synonym Symbols	EVI16
UniProt Protein Name	Transcription factor SOX-4
Protein Family	Transcription factor
UniProt Gene Name	SOX4
UniProt Entry Name	SOX4_HUMAN
NCBI Protein Information	transcription factor SOX-4; SRY-related HMG-box gene 4; ecotropic viral integration site 16
NCBI Summary for SOX4	This intronless 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, such as syndecan binding protein (syntenin). The protein may function in the apoptosis pathway leading to cell death as well as to tumorigenesis and may mediate downstream effects of parathyroid hormone (PTH) and PTH-related protein (PTHrP) in bone development. The solution structure has been resolved for the HMG-box of a similar mouse protein. [provided by RefSeq, Jul 2008]
UniProt Comments for SOX4	SOX4: Transcriptional activator that binds with high affinity to the T-cell enhancer motif 5'-AACAAAG-3' motif. Protein type: Transcription factor; DNA-binding Chromosomal Location of Human Ortholog: 6p22.3 Cellular Component: nucleoplasm; mitochondrion; cytoplasm; nucleus Molecular Function: protein binding; protein heterodimerization activity; transcription factor activity Biological Process: transcription from RNA polymerase II promoter; negative regulation of protein export from nucleus; positive regulation of translation; somatic stem cell maintenance; positive regulation of apoptosis; heart development; positive regulation of transcription, DNA-dependent; regulation of protein stability; Wnt receptor signaling pathway through beta-catenin; glucose homeostasis; DNA damage response, signal transduction by p53 class mediator resulting in cell cycle arrest; glial cell proliferation; negative regulation of cell proliferation; sympathetic nervous system development; regulation of transcription, DNA-dependent; positive regulation of cell proliferation; positive regulation of Wnt receptor signaling pathway; skeletal development; T cell differentiation; glial cell development; pro-B cell differentiation; protein stabilization; positive regulation of insulin secretion; DNA damage response, detection of DNA damage; spinal cord motor neuron differentiation; endocrine pancreas development; limb bud formation; spinal cord development; negative regulation of protein ubiquitination; positive regulation of transcription from RNA polymerase II promoter; neural tube formation
Research Articles on SOX4	**1.** SOX4 is associated with poor prognosis in prostate cancer and promotes epithelial-mesenchymal transition in vitro.
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