

# Anti-SOX7 Antibody

Catalog # ABO11594

#### Specification

## Anti-SOX7 Antibody - Product Information

ApplicationWBPrimary Accession09BT81HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionFactor SOX-7(SOX7) detection. Tested with WB inHuman; Mouse; Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-SOX7 Antibody - Additional Information**

Gene ID 83595

Other Names Transcription factor SOX-7, SOX7

Calculated MW 42197 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

Subcellular Localization Nucleus . Cytoplasm .

**Tissue Specificity** Widely expressed in adult and fetal tissues. Present both in mesenchymal and epithelial cells in some adult tissues, including colon. Tends to be down-regulated in prostate adenocarcinomas and colorectal tumors due to promoter hypermethylation.

**Protein Name** Transcription factor SOX-7

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human SOX7(370-388aa LISVLADATATYYNSYSVS), identical to the related mouse and rat sequences.



**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Contains 1 HMG box DNA-binding domain.

## Anti-SOX7 Antibody - Protein Information

#### Name SOX7

#### Function

Binds to and activates the CDH5 promoter, hence plays a role in the transcriptional regulation of genes expressed in the hemogenic endothelium and blocks further differentiation into blood precursors (By similarity). May be required for the survival of both hematopoietic and endothelial precursors during specification (By similarity). Competes with GATA4 for binding and activation of the FGF3 promoter (By similarity). Represses Wnt/beta-catenin-stimulated transcription, probably by targeting CTNNB1 to proteasomal degradation. Binds the DNA sequence 5'-AACAAT-3'.

Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00267}. Cytoplasm

**Tissue Location** Widely expressed in adult and fetal tissues. Present both in mesenchymal and epithelial cells in some adult tissues, including colon. Tends to be down-regulated in prostate adenocarcinomas and colorectal tumors due to promoter hypermethylation

## **Anti-SOX7 Antibody - Protocols**

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

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

Anti-SOX7 Antibody - Images



	1	2	3	4	5	6	7	8	9
58KD —									
40KD —	•	-	-	-	-	•	-	-	-
29KD -									
20KD —									
14KD -									

Anti-SOX7 antibody, ABO11594, All Western blottingAll lanes: Anti-SOX7(ABO11594) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 40ugLane 2: Human Placenta Tissue Lysate at 40ugLane 3: Rat Lung Tissue Lysate at 40ugLane 4: Rat Testis Tissue Lysate at 40ugLane 5: HELA Whole Cell Lysate at 40ugLane 6: A549 Whole Cell Lysate at 40ugLane 7: HEPG2 Whole Cell Lysate at 40ugLane 8: SMMC Whole Cell Lysate at 40ugLane 9: NEURO Whole Cell Lysate at 40ugPredicted bind size: 42KDObserved bind size: 42KD

#### Anti-SOX7 Antibody - Background

SOX7 belongs to SOX gene family and SOX proteins are transcription factors with critical roles in the regulation of diverse developmental processes. This gene is mapped to 8p23.1. SOX7 gene contains at least 2 exons. In cotransfected 293 cells, Sox7 reduced Wnt(see WNT1)/beta-catenin(see CTNNB1)- stimulated transcription. SOX7 is a potent activator of FGF3 transcription. It not only plays a role in the transcriptional regulation of genes expressed in the hemogenic endothelium but also blocks further differentiation into blood precursors. And it may be required for the survival of both hematopoietic and endothelial precursors during specification.