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SOX2 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10030

Product Information

Application	WB, IHC
Primary Accession	P48431
Other Accession	P48431, NP_003097, NM_003106
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Horse, Bovine, Sheep
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Chicken, Dog, Horse, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34310

Additional Information

Gene ID	6657
Alias Symbol	ANOP3, MCOPS3, MGC2413
Other Names	Transcription factor SOX-2, SOX2
Target/Specificity	SOX2 is a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. The protein may act as a transcriptional activator after forming a protein complex with other proteins. Mutations in this gene have been associated with bilateral anophthalmia, a severe form of structural eye malformation. This intronless gene encodes a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. The product of this gene is required for stem-cell maintenance in the central nervous system, and also regulates gene expression in the stomach. Mutations in this gene have been associated with optic nerve hypoplasia and with syndromic microphthalmia, a severe form of structural eye malformation. This gene lies within an intron of another gene called SOX2 overlapping transcript (SOX2OT). Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications.
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-SOX2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.
Precautions	SOX2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

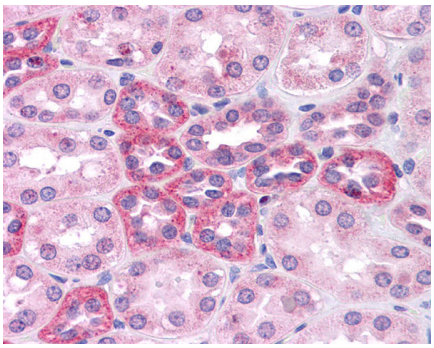
Protein Information

Name	SOX2
Function	Transcription factor that forms a trimeric complex with OCT4 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (By similarity). Binds to the proximal enhancer region of NANOG (By similarity). Critical for early embryogenesis and for embryonic stem cell pluripotency (PubMed:18035408). Downstream SRRT target that mediates the promotion of neural stem cell self-renewal (By similarity). Keeps neural cells undifferentiated by counteracting the activity of proneural proteins and suppresses neuronal differentiation (By similarity). May function as a switch in neuronal development (By similarity).
Cellular Location	Nucleus speckle {ECO:0000250|UniProtKB:Q05066}. Cytoplasm {ECO:0000250|UniProtKB:Q05738}. Nucleus {ECO:0000250|UniProtKB:Q05738}. Note=Acetylation contributes to its nuclear localization and deacetylation by HDAC3 induces a cytoplasmic delocalization (By similarity). Colocalizes in the nucleus with ZNF208 isoform KRAB-O and tyrosine hydroxylase (TH) (By similarity) Colocalizes with SOX6 in speckles. Colocalizes with CAML in the nucleus (By similarity). Nuclear import is facilitated by XPO4, a protein that usually acts as a nuclear export signal receptor (By similarity) {ECO:0000250|UniProtKB:Q05066, ECO:0000250|UniProtKB:Q05738}

Background

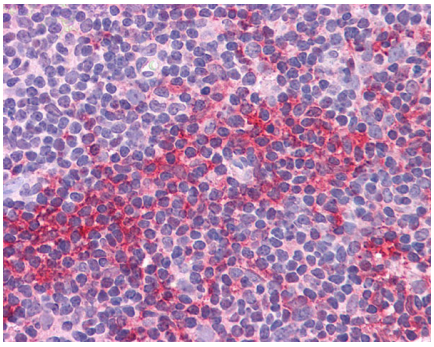
This is a rabbit polyclonal antibody against SOX2. It was validated on Western Blot using a cell lysate as a positive control. Abgent strives to provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire (sales@abgent.com).

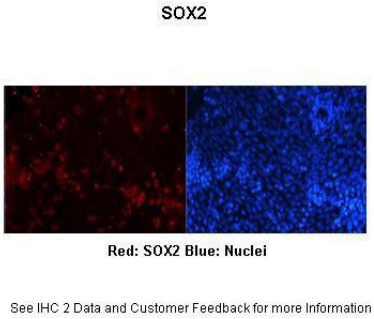
Images



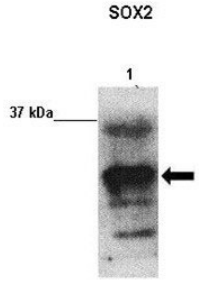
SOX2 antibody - N-terminal region (AI10030) in Human Kidney cells using Immunohistochemistry
Human Kidney

SOX2 antibody - N-terminal region (AI10030) in Human Spleen cells using Immunohistochemistry
Human Spleen

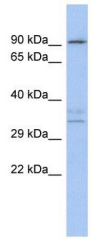




SOX2 antibody - N-terminal region (AI10030) in Xenopus laevis cornea epithellium cells using Immunohistochemistry
Researcher:Kim Perry, University of Illinois
Application:IHC
Species+tissue/cell type:Xenopus laevis cornea epithellium
Primary Antibody Dilution:1:300
Secondary Antibody:Goat anti-rabbit -rhodamine
Secondary Antibody Dilution:1:300



SOX2 antibody - N-terminal region (AI10030) in U87 cells using Western Blot
Sample Type: Lane 1: 20 ug U87 lysate
Primary Antibody Dilution: 1:1000
Secondary Antibody: Anti-rabbit-HRP
Secondary Antibody Dilution: 1:2000
Submitted by: Ander Matheu Fernandez, Biodonostia Institute



SOX2 antibody - N-terminal region (AI10030) in Human OVCAR-3 cells using Western Blot
WB Suggested Anti-SOX2 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:500
Positive Control: OVCAR-3 cell lysate
There is BioGPS gene expression data showing that SOX2 is expressed in OVCAR3