

# SOX2 Antibody

Rabbit mAb Catalog # AP90311

## **Product Information**

Application	WB, IHC, IF, ICC, IHF
Primary Accession	<u>P48431</u>
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	SOX2; ANOP3; MCOPS3; MGC2413; lcc; SRY related HMG box 2;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	34310

### **Additional Information**

Dilution	WD 1.1000 1.2000 IUC 1.50 1.200 ICC/IE 1.50 1.200
Dilution	WB 1:1000~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SOX2
Description	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). Critical for early embryogenesis and for embryonic stem cell pluripotency. May function as a switch in neuronal development. 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).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

#### **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: <u>18035408</u> ). 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}

#### Images



Western blot analysis of SOX2 expression in (1) NCCIT cell lysate; (2) F9 cell lysate.

Image not found : 202311/AP90311-IHC.jpg	Immunohistochemical analysis of paraffin-embedded human cervix carcinoma, using SOX2 Antibody.
Image not found : 202311/AP90311-IF.jpg	Immunofluorescent analysis of NCCIT cells, using SOX2 Antibody .

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