

# SOX2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5343

# **Product Information**

Application	WB
Primary Accession	<u>P48431</u>
Other Accession	<u>P48430</u>
Reactivity	Human, Mouse
Predicted	Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34310
Isotype	Rabbit IgG
Antigen Source	HUMAN

## **Additional Information**

Gene ID	6657
Antigen Region	282-316
Other Names	Transcription factor SOX-2, SOX2
Dilution	WB~~1:1000
Target/Specificity	This SOX2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 282-316 amino acids from the C-terminal region of human SOX2.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SOX2 Antibody (C-term) 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: <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:000250 UniProtKB:Q05066, ECO:0000250 UniProtKB:Q05738}

# Background

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).

## References

Stevanovic M.,et al.Mamm. Genome 5:640-642(1994). Sadler L.A.,et al.Submitted (DEC-1992) to the EMBL/GenBank/DDBJ databases. Fantes J.,et al.Nat. Genet. 33:461-463(2003). Takahashi K.,et al.Cell 131:861-872(2007). Rigbolt K.T.,et al.Sci. Signal. 4:RS3-RS3(2011).

#### Images



Western blot analysis of lysates from F9,NCCIT cell line (from left to right), using SOX2 Antibody (C-term)(Cat. #AW5343). AW5343 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.