

SOX2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21034a

Specification

SOX2 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW WB,E <u>P48431</u> <u>P48430</u>, <u>P54231</u> Human, Mouse Chicken, Sheep Rabbit Polyclonal Rabbit IgG 34310

SOX2 Antibody (C-term) - Additional Information

Gene ID 6657

Other Names Transcription factor SOX-2, SOX2

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.

Dilution WB~~1:1000

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.

SOX2 Antibody (C-term) - 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

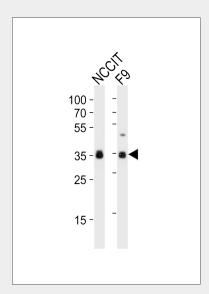
Nucleus speckle {ECO:0000250|UniProtKB:Q05066}. Cytoplasm {ECO:0000250|UniProtKB:Q05738}. Nucleus {ECO:0000250|UniProtKB:Q05738}. Note=Acetylation contributes to its nuclear localization and deacetylation by HDAC3 induces a cytoplasmic delocalization (By similarity). Colocalizes in the nucleus with ZNF208 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}

SOX2 Antibody (C-term) - Protocols

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

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

SOX2 Antibody (C-term) - Images



Western blot analysis of lysates from NCCIT, mouse F9 cell line (from left to right), using SOX2 Antibody (C-term)(Cat. #AP21034a). AP21034a 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.



SOX2 Antibody (C-term) - 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).

SOX2 Antibody (C-term) - 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).