

SOX2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20961b

Specification

SOX2 Antibody (N-term) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

IF, WB,E
P48431
Human
Rabbit
Polyclonal
Rabbit Ig
34310

SOX2 Antibody (N-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 30-63 amino acids from the N-terminal region of human SOX2.

Dilution

IF~~1:25 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

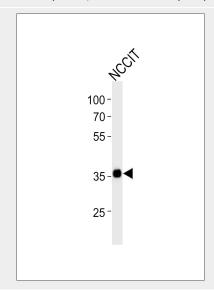
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

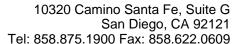
Precautions

SOX2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized U-2 OS (Human osteosarcoma cell line) cells labeling SOX2 with AP20961b at 1/25 dilution, followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/400 dilution (green). Confocal image showing nuclear staining on U-2 OS cell line. Cytoplasmic actin is detected with Alexa Fluor® 555 conjugated with Phalloidin (OB16636430) at 1/100 dilution (red).







SOX2 Antibody (N-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: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 {ECO:0000250|UniProtKB:P48432}.

SOX2 Antibody (N-term) - Protocols

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

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

Western blot analysis of lysate from NCCIT cell line, using SOX2 Antibody (N-term)(Cat. #AP20961b). AP20961b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

SOX2 Antibody (N-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 (N-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).