

(Mouse) Sox2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21154a

Product Information

Application WB, E Primary Accession P48432

Reactivity Human, Mouse

HostRabbitClonalitypolyclonalIsotypeRabbit IgGClone NamesRB50953Calculated MW34454

Additional Information

Gene ID 20674

Other Names Transcription factor SOX-2, Sox2, Sox-2

Target/Specificity This Mouse Sox2 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 34-68 amino acids from the N-terminal

region of mouse Sox2.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

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 (Mouse) Sox2 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name Sox2

Synonyms Sox-2

Function Transcription factor that forms a trimeric complex with POU5F1 (OCT3/4) on

DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (PubMed:15863505, PubMed:17097055, PubMed:19740739, PubMed:32703285). Binds to the

proximal enhancer region of NANOG (PubMed: 15863505). Critical for early embryogenesis and for embryonic stem cell pluripotency (By similarity). Downstream SRRT target that mediates the promotion of neural stem cell self-renewal (PubMed: 22198669). 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:0000255 | PROSITE-ProRule:PRU00267,

ECO:0000269 | PubMed:17097055, ECO:0000269 | PubMed:19349578, ECO:0000269 | PubMed:32127020 }. Cytoplasm Note=Nuclear import is facilitated by XPO4, a protein that usually acts as a nuclear export signal

receptor.

Tissue Location Expressed in the cochlea (at protein level) (PubMed:32127020). Expressed in

the brain and retina (PubMed:15863505, PubMed:7590241). A very low level

of expression is seen in the stomach and lung (PubMed:15863505, PubMed:7590241). Expressed in the kidney (PubMed:15863505).

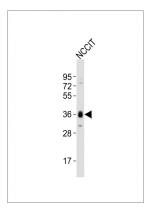
Background

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. 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. Keeps neural cells undifferentiated by counteracting the activity of proneural proteins and suppresses neuronal differentiation (By similarity).

References

Yuan H., et al. Genes Dev. 9:2635-2645(1995). Yuan H., et al. Submitted (AUG-1998) to the EMBL/GenBank/DDBJ databases. Collignon J., et al. Development 122:509-520(1996). Tsuruzoe S., et al. Biochem. Biophys. Res. Commun. 351:920-926(2006). Takahashi K., et al. Cell 126:663-676(2006).

Images



Anti-(Mouse) Sox2 Antibody (N-term) at 1:1000 dilution + NCCIT whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size :34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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