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(Mouse) Sox2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20939b

Product Information

Application	WB, E
Primary Accession	P48432
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51338
Calculated MW	34454

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 6~39 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).

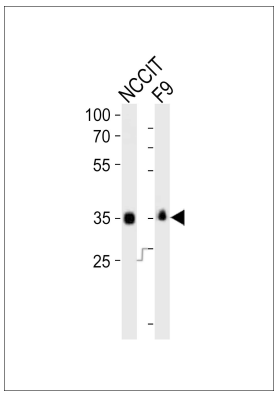
Background

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



Western blot analysis of lysates from NCCIT, mouse F9 cell line (from left to right), using Sox2 Antibody (N-term)(Cat. #AP20939b). AP20939b 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.