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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
Predicted	Bovine, Rabbit, Chicken
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).

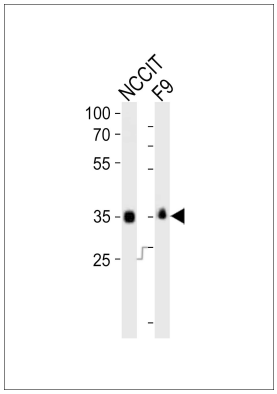
Background

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.

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