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(Mouse) Sox2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21154a

Product Information

Application	WB, E
Primary Accession	P48432
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Rabbit, Chicken
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB50953
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 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).

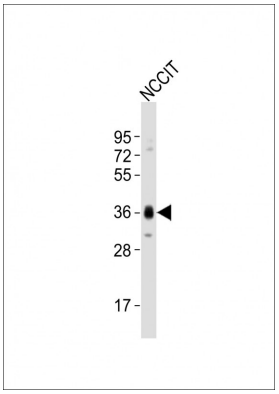
Background

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'.