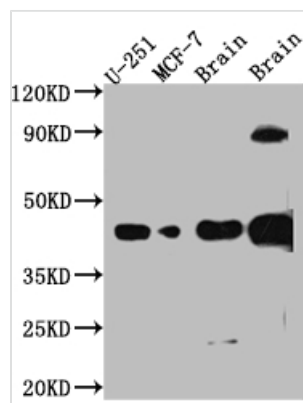




# SOX2 Antibody

<b>Product Code</b>	CSB-RA973770A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P48431
<b>Immunogen</b>	A synthesized peptide derived from human SOX2
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Tested Applications</b>	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
<b>Relevance</b>	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).
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Epigenetics and Nuclear Signaling; Neuroscience; Developmental biology; Signal transduction; Stem cells
<b>Gene Names</b>	SOX2
<b>Accession NO.</b>	2E1

## Image



### Western Blot

Positive WB detected in: U-251 whole cell lysate, MCF-7 whole cell lysate, Mouse Brain whole cell lysate, Rat Brain whole cell lysate

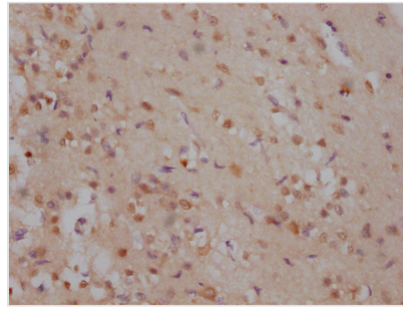
All lanes: SOX2 antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 35 kDa

Observed band size: 40 kDa



IHC image of CSB-RA973770A0HU diluted at 1:100 and staining in paraffin-embedded human brain tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

## Description

SOX2 is well known for its functions in embryonic stem (ES) cell pluripotency, maintenance, and self-renewal. It is an essential factor in generating inducible pluripotent stem (iPS) cells. It also plays an important role in the development and adult tissue homeostasis of different tissues, especially the central nervous system. SOX2 overexpression or gene amplification has been observed in several tissues such as the lung, esophagus, and breast. And SOX2 is associated with multiple events involved in tumorigenesis, including cell proliferation and growth, migration, invasion, metastasis, apoptosis, and chemoresistance, as well as maintenance of stemness.

To produce this recombinant SOX2 antibody, we needed to get the gene sequence of the antibody. B cell screening was used in the process. Once the sequence was obtained, it would lead to the expression plasmids so that the SOX2 antibody can be expressed in mammalian cells. Moreover, this recombinant SOX2 antibody was validated in ELISA, WB, IHC.