

#4194 Store at -20°C

Sox1 Antibody



100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

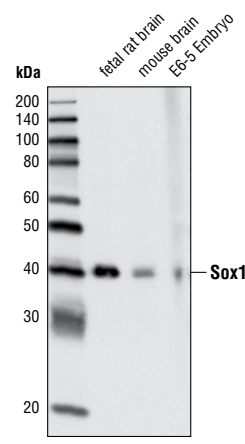
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-F Endogenous	M, R, (H)	40 kDa	Rabbit**

Background: Sox (Sry-related box) genes encode a family of transcription factors that play a myriad of roles in developmental processes (1). Sox1 and Sox2 are the earliest markers that identify neuroectodermal tissue, and these markers, together with Sox9 collectively mark neuronal stem cells (NSC's) that are present in neurogenically active areas of the mature rodent brain (2). Sox1 has been found in the walls of the lateral ventricles and the dentate gyrus, as well as in inactive areas such as the cerebellum where it marks a population of cells in the Purkinje layer known as the Bergmann glia (2). Sox1 is thought to maintain the cell cycle and promote self renewal in NSCs, but also functions in other cell types to promote differentiation (3).

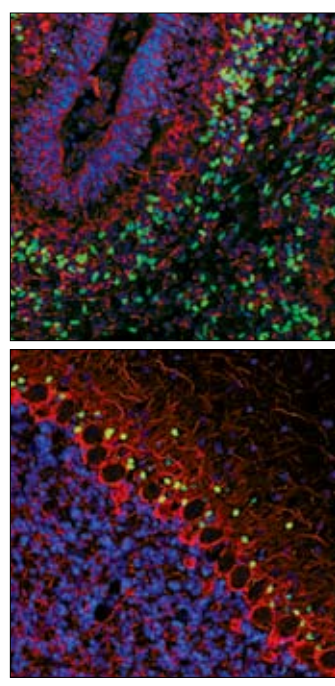
Specificity/Sensitivity: Sox1 Antibody detects endogenous levels of total Sox1 protein. It does not cross-react with endogenous levels of other Sox proteins, including Sox2 and Sox3.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues at the carboxy terminus of human Sox1. Antibodies are purified by Protein A and peptide affinity chromatography.

- Background References:**
- (1) Kiefer, J.C. (2007) *Dev Dyn* 236, 2356-66.
 - (2) Alcock, J. et al. (2009) *Neurosci Lett* 450, 114-6.
 - (3) Kan, L. et al. (2007) *Dev Biol* 310, 85-98.



Western blot analysis of extracts of fetal rat brain, mouse brain and E6-5 embryo, using Sox1 Antibody.



Confocal immunofluorescent analysis of postnatal day 1 (upper) and adult (lower) rat brain using SOX1 Antibody (green) and Neurofilament-L (DA2) Mouse mAb #2835 (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

Entrez-Gene ID #9606
Swiss-Prot Acc. #000570

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**
****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunofluorescence (IF-F)	1:200

For application specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.