

## SOX2 Antibody

Catalog No: #25044

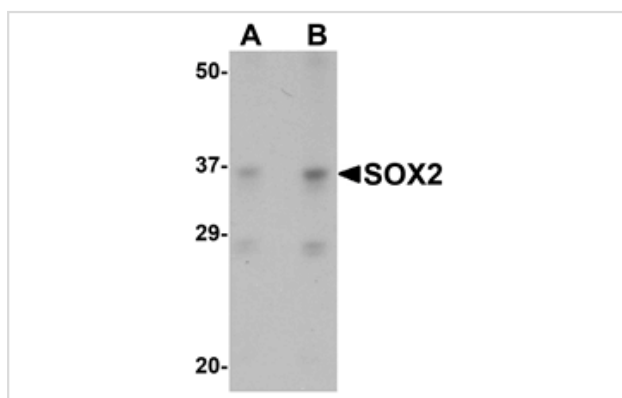
Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

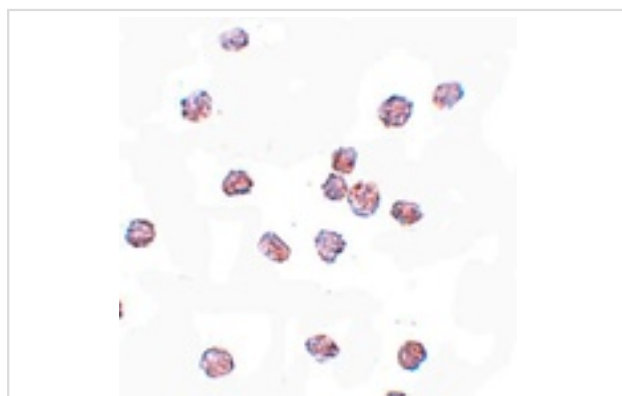
## Description

Product Name	SOX2 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB ICC
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide
Immunogen Description	Raised against a 15 amino acid peptide near the amino terminus of human SOX.
Target Name	SOX2
Other Names	Sex-determining region Y-box 2, SRY-box 2, ANOP3, MCOPS3
Accession No.	Swiss-Prot:P48431Gene ID:6657
Uniprot	P48431
GeneID	6657;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

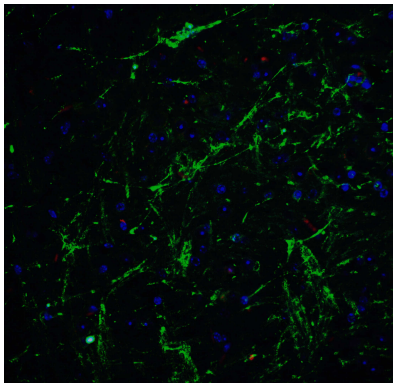
## Images



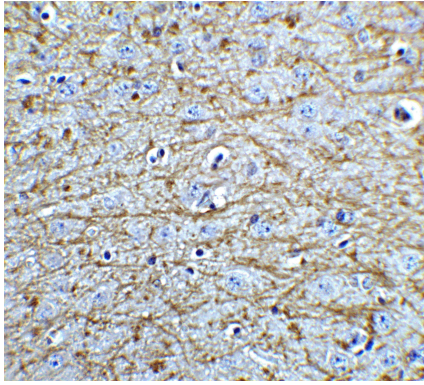
Western blot analysis of SOX2 in 3T3 cell lysate with SOX2 antibody at (A) 1 and (B) 2 ug/mL.



Immunocytochemistry of SOX2 in 3T3 cells with SOX2 antibody at 5 ug/mL.



Immunofluorescence of SOX2 in mouse brain tissue with SOX2 Antibody at 20  $\mu\text{g}/\text{mL}$ .



Immunohistochemistry of SOX2 in mouse brain tissue with SOX2 Antibody at 5  $\mu\text{g}/\text{mL}$ .

## Background

SOX2 is a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. SOX2 is required for stem-cell maintenance in the central nervous system, and also regulates gene expression in the stomach. Mutations in this gene have been associated with optic nerve hypoplasia and with syndromic microphthalmia, a severe form of structural eye malformation. The role of SOX2 in embryonic development suggested that it might be useful in the creation of stem cells that might be useful in cell replacement therapies in the treatment of degenerative diseases. Artificial stem cells, termed induced pluripotent stem (iPS) cells, can be created by expressing SOX2 and the transcription factors POU5F1, Klf4 and Lin28 along with c-Myc in mouse fibroblasts. Other experiments have shown that iPS cells could be generated using expression plasmids expressing POU5F1, SOX2, Klf4 and c-Myc, eliminating the need for virus introduction.

Note: This product is for in vitro research use only