

For Research Use Only

# SOX2 Polyclonal antibody

Catalog Number:11064-1-AP

Featured Product

297 Publications



## Basic Information

<b>Catalog Number:</b> 11064-1-AP	<b>GenBank Accession Number:</b> BC013923	<b>Purification Method:</b> Antigen affinity purification
<b>Concentration:</b> 600 ug/ml	<b>GeneID (NCBI):</b> 6657	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:200 IF-P 1:50-1:500 IF/ICC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P48431	
<b>Isotype:</b> IgG	<b>Full Name:</b> SRY (sex determining region Y)-box 2	
<b>Immunogen Catalog Number:</b> AG1530	<b>Calculated MW:</b> 34 kDa	
	<b>Observed MW:</b> 34-40 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, IF-P, ELISA

**Cited Applications:**  
WB, IHC, IF, IP, CoIP

**Species Specificity:**  
human, mouse, rat, zebrafish

**Cited Species:**  
human, mouse, rat, pig, hamster, goat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

WB : HEK-293 cells,

IHC : human lung cancer tissue, human cervical squamous cancer tissue, human gliomas tissue, mouse brain tissue, mouse embryo tissue

IF-P: mouse brain tissue, human embryonic stem cells, mouse embryo tissue

IF/ICC : U-251 cells,

## Background Information

Sox2, also known as SRY (sex determining region Y)-box 2, is a transcription factor essential for maintaining self-renewal of undifferentiated ES cells and is one of the key transcription factors used to reprogram mouse and human fibroblasts to a pluripotent state. Sox2 expressed in undifferentiated pluripotent stem cells and germ cells during development. Affinity purified rabbit anti-Sox2 antibody can be used to demonstrate pluripotency of ES and iPS cells. This antibody is a rabbit polyclonal antibody raised against an internal region of human SOX2. A rare undifferentiated cell population that is intermingled with the Bergmann glia of the adult murine cerebellar cortex, expresses the stem cell markers Sox2 and Nestin, and lacks markers of glial or neuronal differentiation. Sox2-expressing neural stem cells in the subgranular zone (SGZ), a well-known stem cell niche of the adult brain.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yang Liu	27685621	Cell Death Dis	WB
Yuanxin Zhai	36039673	Biomater Sci	IF
Chenlong Li	31558707	Cell Death Dis	WB

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

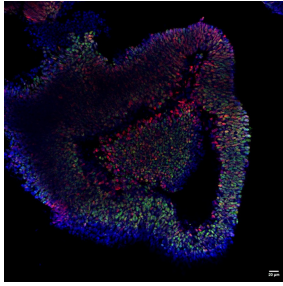
T: 4006900926

E: Proteintech-CN@ptglab.com

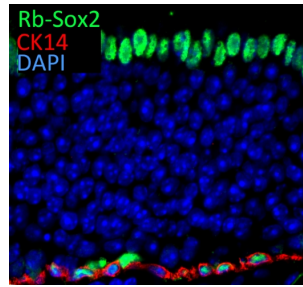
W: ptgcn.com

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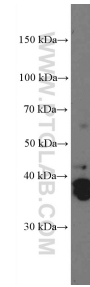
## Selected Validation Data



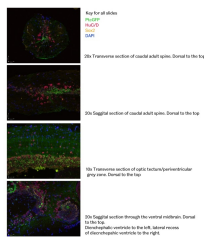
Retinal organoids (day 30) generated from human induced pluripotent stem cells (iPSCs) and fixed with 4% PFA. Stained for PAX6 with 12323-1-AP at 1:600 (green), and SOX2 with 11064-1-AP at 1:200 (red), Nuclear stain DAPI (blue). Scale bar = 20  $\mu$ m. Data generated by Alessandro Bellapianta at Johannes Kepler Universitat, Austria.



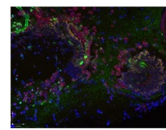
IF result of SOX2 antibody (11064-1-AP, 1:300) with 1% PLP fixed adult mouse olfactory epithelium. (Red:CK14; Green: SOX2; Blue: DAPI). By Brian Lin, Tufts University.



HEK-293 cells were subjected to SDS PAGE followed by western blot with 11064-1-AP (SOX2 Antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.

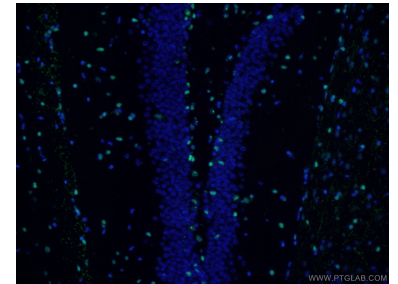


IF result of anti-SOX2 (11064-1-AP) in Zebrafish by Dr. Caroline Parkin.

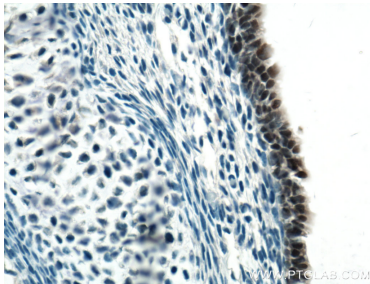


20X Sagittal section through the ventral midbrain. Dorsal to the top. Diencephalic ventricle to left. Lateral recess of diencephalic ventricle to the right.

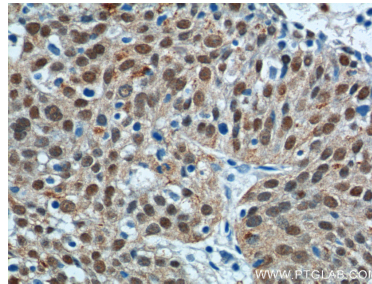
IF result of anti-SOX2 (11064-1-AP) with the midbrain of zebrafish by Dr.Caroline.



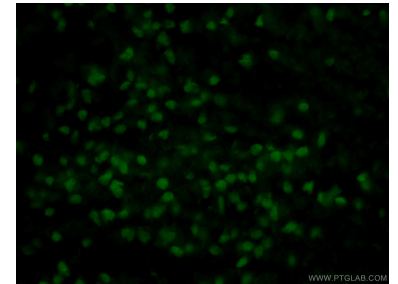
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 11064-1-AP (SOX2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded mouse embryo tissue slide using 11064-1-AP (SOX2 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



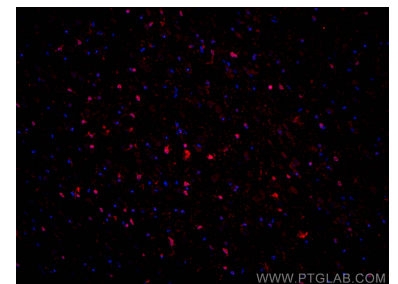
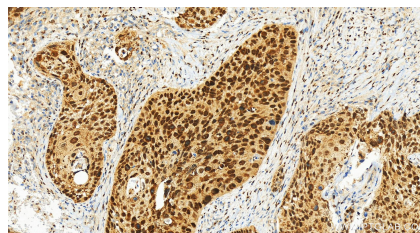
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 11064-1-AP (SOX2 Antibody) at dilution of 1:200 (under 40x lens).



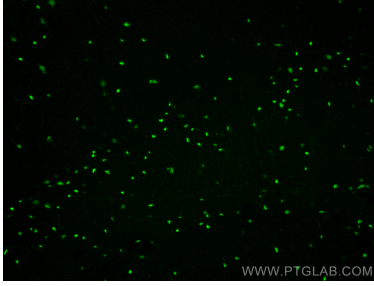
Immunofluorescent analysis of (4% PFA) fixed mouse embryo tissue using 11064-1-AP (SOX2 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



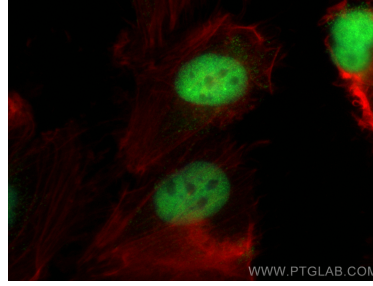
Immunohistochemical analysis of paraffin-embedded mouse embryo tissue slide using 11064-1-AP (SOX2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human cervical squamous cancer tissue slide using 11064-1-AP (SOX2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

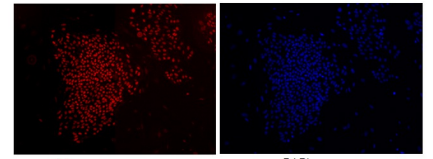


Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using SOX2 antibody (11064-1-AP) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed U-251 cells using SOX2 antibody (11064-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).

Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using SOX2 antibody (11064-1-AP) at dilution of 1:200 and CoraLite® 594-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Confocal immunofluorescent analysis of human embryonic stem cells with 11064-1-AP at dilution of 1:50. The PE shows staining with 11064-1-AP/PE. The DAPI shows nuclear staining by DAPI.

Confocal immunofluorescent analysis of human embryonic stem cells with 11064-1-AP at dilution of 1:50. The PE shows staining with 11064-1-AP/PE. The DAPI shows nuclear staining by DAPI.