## For Research Use Only

# SOX2 Polyclonal antibody

Catalog Number: 11064-1-AP

**Featured Product** 

310 Publications



**Basic Information** 

Catalog Number:

11064-1-AP

BC013923

Concentration:

600 ug/ml

6657

Source:

Rabbit

UNIPROT ID:

Rabbit

P48431

Isotype:

GenBank Accession Number:

GeneID (NCBI):

6657

UNIPROT ID:

P48431

Full Name:

SRY (sex determining region Y)-box 2

Immunogen Catalog Number: Calculated MW:

AG1530 34 kDa

Observed MW: 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

**Purification Method:** 

WB: 1:500-1:1000 IHC: 1:50-1:200

IF-P: 1:50-1:500

IF/ICC: 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

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

IF/ICC : U-251 cells,

IF: Retinal organoids, mouse olfactory epithelium

tissue, Zebrafish tissue

## **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 undiferentiated 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 diferentiation. 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

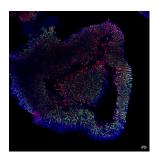
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

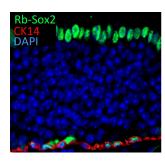
W: ptgcn.coi

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

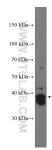
#### Selected Validation Data



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 with 4% FFA. Staffled for PANO With 12323-1-AP at 1:200 (green), and SOX2 with 11064-1-AP at 1:200 (red), Nuclear stain DAPI (blue). Scale bar = 20 µm. 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.



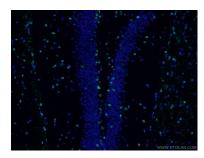
HEK-293 cells were subjected to SDS PAGE followed by western blot with 11064-1-AP (SOX2 Antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



IF result of anti-SOX2 (11064-1-AP) in Zebrafish by

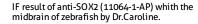


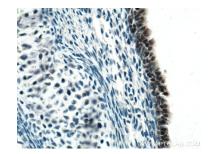
20X Sagittal section through the ventral midbrain. Dorsal to the top Dienchephalic ventricle to left. Lateral recess of diecnchepahic ventricle to the right.



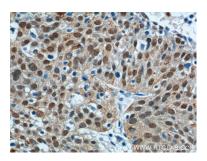
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 11064-1-AP (SOX2 antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).

Dr. Caroline Parkin.

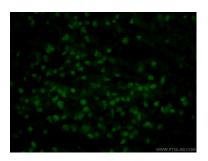




Immunohistochemical analysis of paraffinembedded mouse embryo tissue slide using 11064-1-AP (SOX2 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

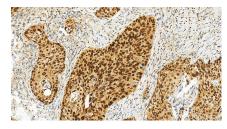


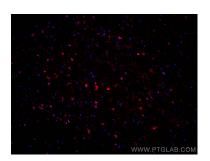
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 11064-1-AP (SOX2 Antibody) at dilution of 1:200 (under 40x lens).



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 Affini Pure Goat Anti-Rabbit IgG(H+L).

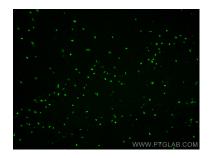
Immunohistochemical analysis of paraffinembedded mouse embryo tissue slide using 11064-1-AP (SOX2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



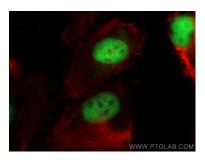


Immunohistochemical analysis of paraffinembedded human cervical squamous cancer tissue slide using 11064-1-AP (SOX2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

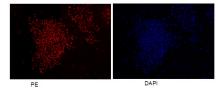
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using SOX2 antibody (11064-1-AP) at dilution of 1:200 and CoraLite®594-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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).



Confocal immunofluorescent analysis of human embronic 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 embronic 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.