IMMUNOLOGICAL SCIENCES Product Data Sheet

AB-83387 **SOX2 Polyclonal Antibody**

Size: 100 ug

Host: Rabbit

Immunogen: Recombinant protein of human SOX2

Isotype: IgG Affinity Purified

Molecular Weight: 34kDa

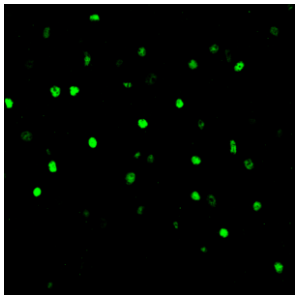
Background: Embryonic stem cells are derived from the inner cell mass of the blastocyst and are unique in their pluripotent capacity and potential for self-renewal. Sox2 is one of a set of transcription factors that are crucial for the maintenance of pluripotency (1). Sox2, Oct-4, and Nanog cooperate in this network (1-3), and siRNA knockdown of either Sox2 or Oct-4 results in loss of pluripotency (4,5). Chromatin immunoprecipitation experiments have shown that Sox2 and Oct-4 bind to thousands of gene regulatory sites, highlighting the importance of these transcription factors in early embryonic development (6,7). It has recently been shown that Sox2 is amplified in lung and esophageal squamous cell tumors (8).

Reactivity: Human, Mouse, Rat

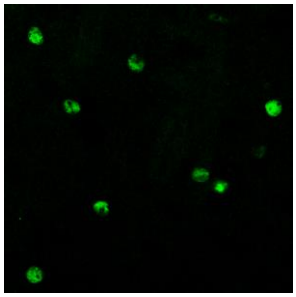
Applications:
Western Blot: 1:500- 1:1000
Immunohistochemistry (Paraffin-embedded tissues): 1:50 - 1:100
Immunohistochemistry (Frozen Tissues) 1:100- 1:200
Immunocytochemsitry: 1:100-1:200
Immunofluorescence: 1:100- 1:200

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage: Store at -20℃. Avoid freeze / thaw cycles.



1. SOX2
Immunohistochemistry Frozen Tissues dilution 1:100
on cortex tissues of wild type mouse “enlargement 40x 03”



2. SOX2 Immunohistochemistry Frozen Tissues dilution: 1:100
on striated tissues of wild type mouse “enlargement 63x”

Images 1 & 2 by courtesy of: Dr.Giampa’ – Dr.Alvino – C/O Dep.Cell Biology – UCSC- Lab. Prof. Parolini

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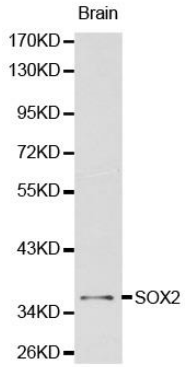
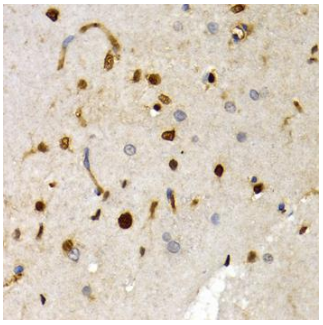
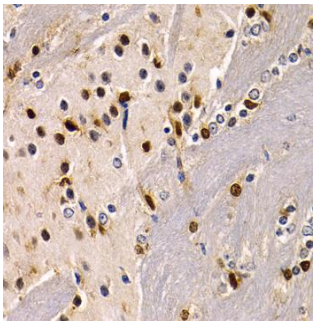
- Incubation with primary antibody at 4 ° C for 72 hours
SOX2 dilution 1: 100 in PB-TritonX 0.3% + sodium azide 0.02%
- 3 washes of 5 minutes each in PB
- Incubation with secondary antibody at room temperature for 2hours
488 dilution 1: 200 PB-TritonX 0.3% + sodium azide 0.02%
- 3 washes of 5 minutes each in PB



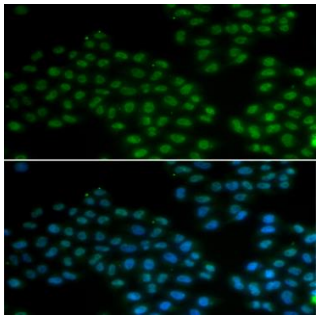
3. Western blot analysis of brain cell lysate using SOX2 antibody.



4. Immunohistochemistry of paraffin-embedded rat brain using SOX2 antibody at dilution of 1:100 (400x lens).



5. Immunohistochemistry of paraffin-embedded mouse brain using SOX2 antibody at dilution of 1:100 (400x lens).



6. Immunofluorescence analysis of MCF7 cell using SOX2 antibody. Blue: DAPI for nuclear staining.

References for SOX2 Polyclonal Antibody (AB-83387)

Journal: Oncogene
Application: WB, IF
PMID:28394339
Title: NSPc1 promotes cancer stem cell self-renewal by repressing the synthesis of all-trans retinoic acid via targeting RDH16 in malignant glioma

Journal: Cell death and disease
Application: IP , IF:
PMID: 29752436
Title: FOXM1 contributes to taxane resistance by regulating UHRF1-controlled cancer cell stemness

Journal: Cell death & disease
Application:WB IF:
PMID:30631035
Title: Acidosis enhances the self-renewal and mitochondrial respiration of stem cell-like glioma cells through CYP24A1-mediated reduction of vitamin D.