Anti-SOX2 Antibody [C9-F10]

EM1708-84

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IHC-P
Molecular Wt:	34 kDa
Clone number:	C9-F10

Description: Transcription factor that forms a trimeric complex with OCT4 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (By similarity). Critical for early embryogenesis and for embryonic stem cell pluripotency. May function as a switch in neuronal development. Downstream SRRT target that mediates the promotion of neural stem cell self-renewal (By similarity). Keeps neural cells undifferentiated by counteracting the activity of proneural proteins and suppresses neuronal differentiation (By similarity). Defects in SOX2 are the cause of microphthalmia syndromic type 3 (MCOPS3). Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities.

Immunogen: Recombinant protein

Positive control: SOX2-hIgGFc transfected HEK293 cell lysate, human lung cancer tissue, human esophageal cancer tissue, NTERA-2.

Subcellular location: Nucleus.

Database links: SwissProt: P48431 Human

Recommended Dilutions:

WB	1:500-1:1,000
IF-cell	1:50-1:200
IHC-P	1:100-1:500

Storage Buffer: Purified antibody in PBS with 0.05% sodium azide.

Storage Instruction: 4℃; -20℃ for long term storage.

Purity: Protein A affinity purified.

Images

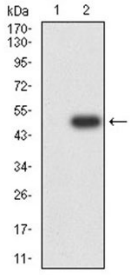

Fig1: Western blot analysis of SOX2 on HEK293 (1) and SOX2-hIgGFc transfected HEK293 (2) cell lysate using anti-SOX2 antibody at 1/1,000 dilution.

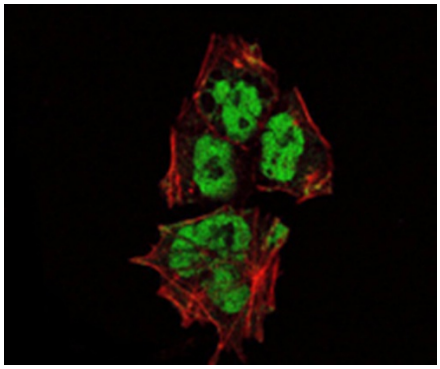

Fig2: ICC staining SOX2 (green) and Actin filaments (red) in NTERA-2 cells. The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

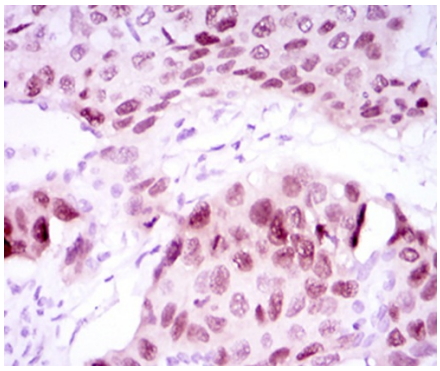

Fig3: Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-SOX2 antibody. Counter stained with hematoxylin.

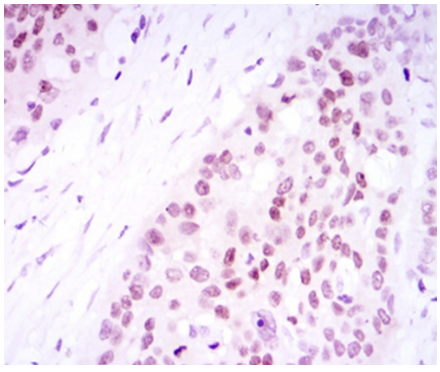

Fig4: Immunohistochemical analysis of paraffin-embedded human esophageal cancer tissue using anti-SOX2 antibody. Counter stained with hematoxylin.

Background References

1. Li Y et al. Abnormal Neural Progenitor Cells Differentiated from Induced Pluripotent Stem Cells Partially Mimicked Development of TSC2 Neurological Abnormalities. Stem Cell Reports 8:883-893 (2017).
2. Yuan J et al. M2 microglia promotes neurogenesis and oligodendrogenesis from neural stem/progenitor cells via the PPAR signaling pathway. Oncotarget 8:19855-19865 (2017).