

SOX-2 Monoclonal Antibody

Catalog No: YM0594

Reactivity: Human

Applications: WB;IHC;IF;ELISA

Target: SOX-2

Fields: >>Hippo signaling pathway;>>Signaling pathways regulating pluripotency of

stem cells

P48431

P48432

Gene Name: SOX2

Protein Name: Transcription factor SOX-2

Human Gene Id: 6657

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fragment of human SOX-2 expressed in E. Coli.

Specificity: SOX-2 Monoclonal Antibody detects endogenous levels of SOX-2 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

Purification : Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 34kD

1/3



P References:

- 1. Proc Natl Acad Sci U S A. 2008 Nov 25;105(47):18396-401.
- 2. J Biol Chem. 2008 Nov 28;283(48):33730-5.
- 3. Nature. 2008 Oct 23;455(7216):1124-8.

Background:

SRY-box 2(SOX2) Homo sapiens This intronless gene encodes 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. The product of this gene 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. This gene lies within an intron of another gene called SOX2 overlapping transcript (SOX2OT). [provided by RefSeq, Jul 2008],

Function:

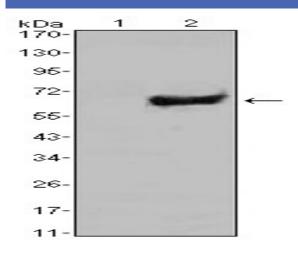
disease:Defects in SOX2 are the cause of microphthalmia syndromic type 3 (MCOPS3) [MIM:206900]. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities. MCOPS3 is characterized by the rare association of malformations including uni- or bilateral anophthalmia or microphthalmia, and esophageal atresia with trachoesophageal fistula.,function: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. Critical for early embryogenesis and for embryonic stem cell pluripotency,,online information:Sox2 entry,PTM:Sumoylation inhibits bin

Subcellular Location :

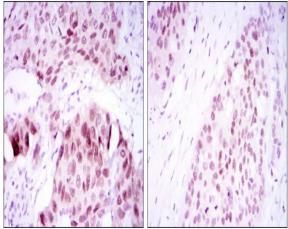
Nucleus speckle . Cytoplasm . Nucleus . Acetylation contributes to its nuclear localization and deacetylation by HDAC3 induces a cytoplasmic delocalization (By similarity). Colocalizes in the nucleus with ZNF208 isoform KRAB-O and tyrosine hydroxylase (TH) (By similarity). Colocalizes with SOX6 in speckles. Colocalizes with CAML in the nucleus (By similarity). Nuclear import is facilitated by XPO4, a protein that usually acts as a nuclear export signal receptor (By similarity).

Expression:	Fetal brain,Lung,Retina,
Tag:	hot
Sort:	_1
No4 :	1
Host:	Mouse
Modifications:	Unmodified

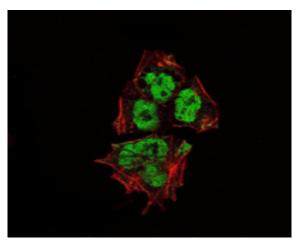
Products Images



Western Blot analysis using SOX-2 Monoclonal Antibody against HEK293 (1) and SOX2-hlgGFc transfected HEK293 (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded lung cancer tissues (left) and esophageal cancer tissues (right) with DAB staining using SOX-2 Monoclonal Antibody.



Immunofluorescence analysis of NTERA-2 cells using SOX-2 Monoclonal Antibody (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.