Best Tools for immunology Research

Sox2 mouse mAb

Catalog No :	YM1221
Reactivity :	Mouse
Applications :	WB;FC;ICC
Target :	SOX-2
Fields :	>>Hippo signaling pathway;>>Signaling pathways regulating pluripotency of stem cells
Gene Name :	sox2
Human Gene Id :	20674
Human Swiss Prot No :	P48431
Mouse Swiss Prot No :	P48432
Immunogen :	Purified recombinant mouse Sox2 protein fragments expressed in E.coli
Specificity :	This antibody detects endogenous levels of Sox2 and does not cross-react with related proteins.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	wb 1:1000 icc 1:150
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	35kD

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

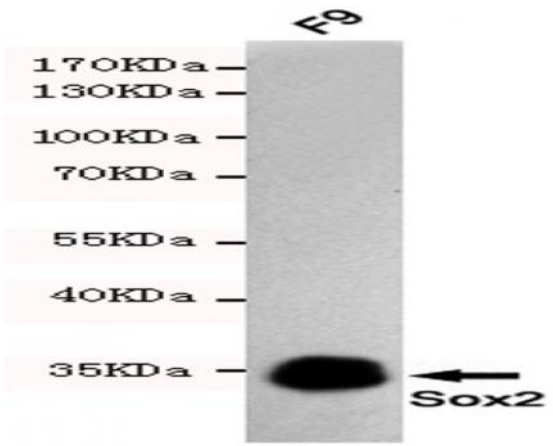
Subcellular Location :

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). .

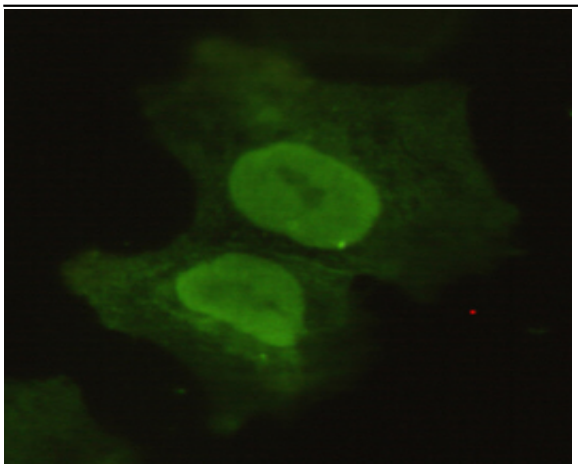
Expression :

Fetal brain,Lung,Retina,

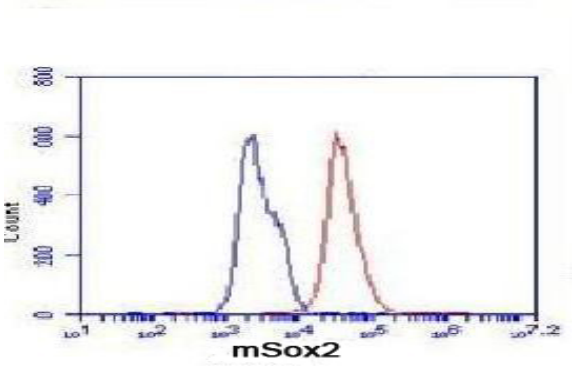
Products Images



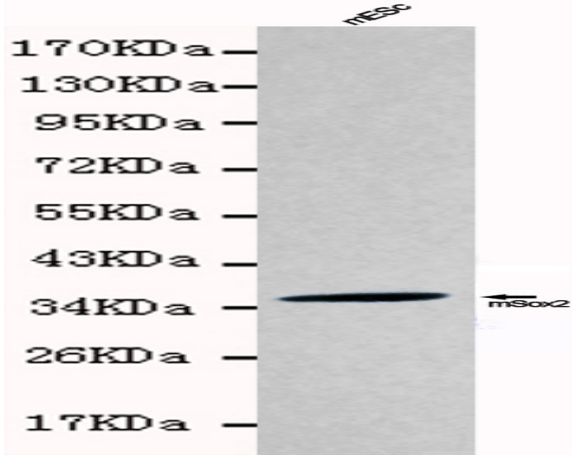
Western blot detection of Sox2 in F9 cell lysates using Sox2 mouse mAb (1:1000 diluted).Predicted band size:35KDa.Observed band size:35KDa.



Immunocytochemistry of COS7 cells using anti-Sox2 mouse mAb diluted 1:150.



Flow Cytometry analysis of F9 cells stained with Sox2 (red, 1/100 dilution), followed by FITC-conjugated goat anti-mouse IgG. Blue line histogram represents the isotype control, normal mouse IgG.



Western blot detection of Sox2 in mES cell lysates using Sox2 antibody(1:1000 diluted).Predicted band size:35KDa,Observed band size:35KDa.Kindly provided by Dr. Qintong Li at the College of Life Sciences, Sichuan University