SOX2 recombinant protein

Catalog#: AD3104 | Size: 30μL/50μL/100μL

Main Information

Reactivity
Human

Detailed Information

Formulation	Phosphate-buffered solution
Source	Mammalian cells
Purity	>90% as determined by SDS-PAGE
Storage	-15°C to -25°C/1 year(Avoid freeze / thaw cycles)

Antigen&Target Information

Sequence	Amino acid:151-251,with rabbit FC tag.
Gene Name	SOX2
Protein Name	Transcription factor SOX-2
Other Name	SOX2 ;Transcription factor SOX-2

Database Link

Organism	Gene ID	SwissProt
Human	6657	P48431

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 binding on DNA and negatively regulates the FGF4 transactivation.,similarity:Contains 1 HMG box DNA-binding domain.

Cellular Localization

Nuclear

Tissue Expression

Fetal brain,Lung,Retina.

Signaling Pathway

Cellular Processes >> Cellular community - eukaryotes >> Signaling pathways regulating pluripotency of stem cells
Environmental Information Processing >> Signal transduction >> Hippo signaling pathway

---

Contact Information

+886-32876194 www.acebiolab.com Order: order@acebiolab.com Support: service@acebiolab.com
RM. 7, 13F., NO. 268, SEC. 1, GAOTIEZHANQIAN W. RD., ZHONGLI DIST., TAOYUAN CITY 320016 , TAIWAN (R.O.C.)