



Rabbit Anti-SOX2 antibody

SL0523R

Product Name:	SOX2
Chinese Name:	胚胎Stem cells关键蛋白抗体
Alias:	transcriptional factor SOX2; ANOP3; cb236; Delta EF2a; lcc; MCOPS3; MGC148683; MGC2413; RGD1565646; Sex determining region Y box 2; Sex determining region Y-box 2; SOX 2; SRY (sex determining region Y) box 2; SRY box containing gene 2; SRY related HMG box 2; SRY related HMG box gene 2; SRY-box 2; ysb; SOX2_HUMAN; Transcription factor SOX-2; SOX2 HUMAN.
文献引用  :	<p>Specific References(6) SL0523R has been referenced in 6 publications.</p> <p>[IF=2.51]Gao, Qian, et al. "Expression pattern of embryonic stem cell markers in DFAT cells and ADSCs." Molecular biology reports 39.5 (2012): 5791-5804.Rat. PubMed:22237862</p> <p>[IF=2.15]Liu, Yu-Hong, et al. "A signature for induced pluripotent stem cell?Cassociated genes in colorectal cancer."Medical Oncology 30.1 (2013): 1-11.(WB;Human. PubMed:23307247</p> <p>[IF=3.61]Wang, Li, et al. "Silencing stem cell factor attenuates stemness and inhibits migration of cancer stem cells derived from Lewis lung carcinoma cells."Tumor Biology (2015): 1-15.WB;Mouse. PubMed:26666817</p> <p>[IF=2.47]Yan, Yu-hui, et al. "Osthole Protects Bone Marrow-Derived Neural Stem Cells from Oxidative Damage through PI3K/Akt-1 Pathway." Neurochemical Research (2016): 1-8.other;Mouse. PubMed:27734182</p>

	<p>[IF=3.18]Liu, Yi-Zhen, et al. "A panel of protein markers for the early detection of lung cancer with bronchial brushing specimens." Cancer cytopathology 122.11 (2014): 833-841.IHC-P;Human.</p> <p style="text-align: right;">PubMed:25045014</p> <p>[IF=5.23]Ma, Fanglin, et al. "Lin28a promotes self-renewal and proliferation of dairy goat spermatogonial stem cells (SSCs) through regulation of mTOR and PI3K/AKT." Scientific Reports 6 (2016): 38805.IF(ICC);Goat.</p> <p style="text-align: right;">PubMed:27941834</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,Guinea Pig,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	34kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Transcription factor SOX-2:227-317/317
Isotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>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].</p> <p>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 (By similarity). Critical for early embryogenesis and for</p>

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.

Subunit:

Interacts with ZSCAN10. Interacts with SOX3 and FGFR1.

Subcellular Location:

Nucleus.

Post-translational modifications:

Sumoylation inhibits binding on DNA and negatively regulates the FGF4 transactivation.

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.

Similarity:

Contains 1 HMG box DNA-binding domain.

SWISS:

P48432

Gene ID:

6657

Database links:

[Entrez Gene: 6657](#)Human

[Entrez Gene: 20674](#)Mouse

[Oimim: 184429](#)Human

[SwissProt: P48431](#)Human

[SwissProt: P48432](#)Mouse

[Unigene: 518438](#)Human

[Unigene: 65396](#)Mouse

Important Note:

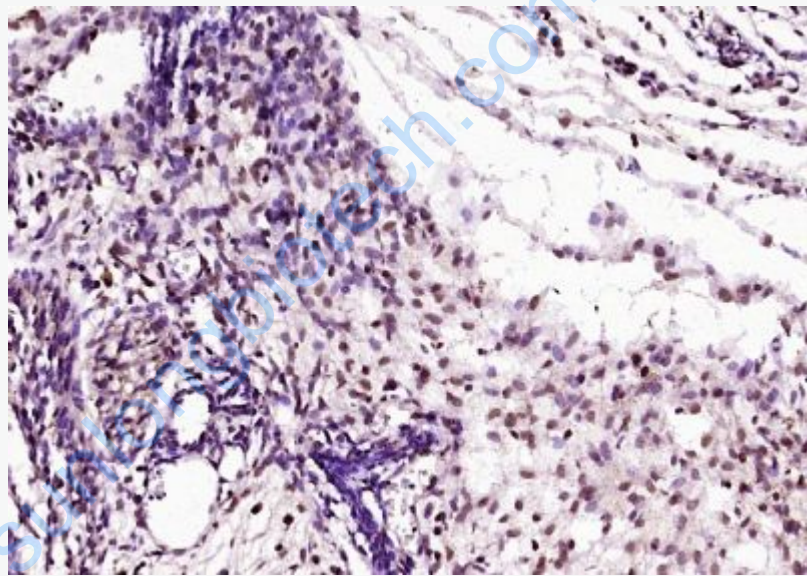
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Embryonic Stem Cell Marker (胚胎Stem cellsMaker)

转录因子:胚胎Stem

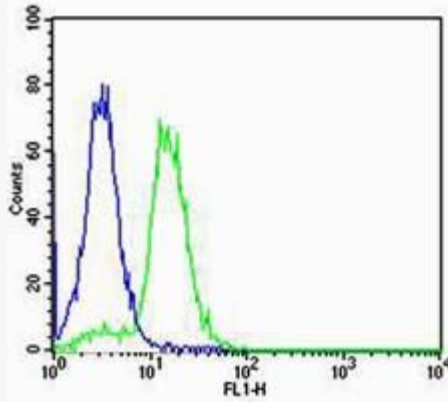
cells相关蛋白Sox2是sox基因家族的一个成员,Sox2与Oct4、Nanog一样是胚胎Stem cells重要的转录因子,是维持Stem

cells特性中起到重要的作用因子;由于它在早期胚胎发生、神经分化和晶状体发育等多种重要的发育事件中都起着关键的作用,从而引起了越来越广泛的关注。



Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse embryo); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SOX2) Polyclonal Antibody, Unconjugated (SL0523R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Cell: NCCIT

Concentration: 1:100

Host/Isotype: Rabbit/IgG

Flow cytometric analysis of Rabbit IgG isotype control (Cat#: bs-0523R) on NCCIT (green) compared with control in the absence of primary antibody (blue) followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG(H+L) secondary antibody .



Blank control: Hela.

Primary Antibody (green line): Rabbit Anti-SOX2 antibody (SL0523R)

Dilution: $1\mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: $1\mu\text{g} / \text{test}$.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then

permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Blank control: U251.

Primary Antibody (green line): Rabbit Anti-SOX2 antibody (SL0523R)

Dilution: 2µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: 1µg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.