



Rabbit Anti-SOX9 antibody

SL4177R

Product Name:	SOX9
Chinese Name:	转录因子SOX9蛋白抗体
Alias:	CMD 1; CMD1; CMPD 1; CMPD1; SOX 9; Sox9; SOX9_HUMAN; SRA 1; SRA1 antibody SRY (sex determining region Y) box 9 (campomelic dysplasia autosomal; SRY (sex determining region Y) box 9; SRY (sex determining region Y)-box 9; SRY (sex-determining region Y)-box 9 protein; Transcription factor SOX 9; Transcription factor SOX-9; transcription factor SOX9; campomelic dysplasia autosomal sex reversal.
文献引用 PubMed :	<p>Specific References(6)SL4177R has been referenced in 6 publications.</p> <p>[IF=6.59]Papaioannou, Garyfallia, et al. "MicroRNA-140 provides robustness to the regulation of hypertrophic chondrocyte differentiation by the PTHrP-HDAC4 pathway." Journal of Bone and Mineral Research (2014).WB;Mouse. PubMed:not posted yet</p> <p>[IF=2.09]Wang, Wei, et al. "Overexpression of heparan sulfate 6-O-sulfotransferase-2 enhances fibroblast growth factor-mediated chondrocyte growth and differentiation." International Journal of Molecular Medicine 36.3 (2015): 825-832.WB;Mouse. PubMed:26133911</p> <p>[IF=6.36]Montorsi, Lucia, et al. "Loss of zfp36 expression in colorectal cancer correlates to wnt/?-catenin activity and enhances epithelial-to-mesenchymal transition through upregulation of zeb1, sox9 and macc1." Oncotarget (2016).WB;Human. PubMed:27463018</p> <p>[IF=3.23]Webster, Mark K., et al. "Evidence of BrdU Positive Retinal Neurons after Application of an Alpha7 Nicotinic Acetylcholine." Neuroscience (2017).IHC;Rat. PubMed:28147247</p>

	<p>[IF=1.56] Mi, Jie, et al. "Study of the effect of miR?124 and the SOX9 target gene in Hirschsprung's disease." Molecular medicine reports 9.5 (2014): 1839-1843. WB;Human.</p> <p style="text-align: center;">PubMed:24604230</p> <p>[IF=1.55] Yang, Jinjiang, Ying Lu, and Ai Guo. "Platelet-rich plasma protects rat chondrocytes from interleukin-1β-induced apoptosis." Molecular Medicine Reports 14.5 (2016): 4075-4082. WB;Rat.</p> <p style="text-align: center;">PubMed:27665780</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Rabbit,
Applications:	WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 Flow-Cyt=1 μ g/Test IF=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:	56kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SOX9:121-220/509
Lsotype:	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>The protein encoded by this gene recognizes the sequence CCTTGAG along with other members of the HMG-box class DNA-binding proteins. It acts during chondrocyte differentiation and, with steroidogenic factor 1, regulates transcription of the anti-Muellerian hormone (AMH) gene. Deficiencies lead to the skeletal malformation syndrome campomelic dysplasia, frequently with sex reversal. [provided by RefSeq].</p> <p>Function: Plays an important role in the normal skeletal development. May regulate the expression of other genes involved in chondrogenesis by acting as a transcription factor for these genes.</p> <p>Subcellular Location: Nucleus (Potential).</p> <p>DISEASE:</p>

Defects in SOX9 are the cause of campomelic dysplasia (CMD1) [MIM:114290]. CMD1 is a rare, often lethal, dominantly inherited, congenital osteochondrodysplasia, associated with male-to-female autosomal sex reversal in two-thirds of the affected karyotypic males. A disease of the newborn characterized by congenital bowing and angulation of long bones, unusually small scapulae, deformed pelvis and spine and a missing pair of ribs. Craniofacial defects such as cleft palate, micrognathia, flat face and hypertelorism are common. Various defects of the ear are often evident, affecting the cochlea, malleus incus, stapes and tympanum. Most patients die soon after birth due to respiratory distress which has been attributed to hypoplasia of the tracheobronchial cartilage and small thoracic cage.

Defects in SOX9 are the cause of 46,XX sex reversal type 2 (SRXX2) [MIM:278850]. SRXX2 is a condition in which male gonads develop in a genetic female (female to male sex reversal).

Similarity:

Contains 1 HMG box DNA-binding domain.

SWISS:

P48436

Gene ID:

6662

Database links:

[Entrez Gene: 6662](#)Human

[Entrez Gene: 20682](#)Mouse

[Entrez Gene: 140586](#)Rat

[Omim: 608160](#)Human

[SwissProt: P48436](#)Human

[SwissProt: Q04887](#)Mouse

[SwissProt: O18896](#)Pig

[Unigene: 647409](#)Human

[Unigene: 286407](#)Mouse

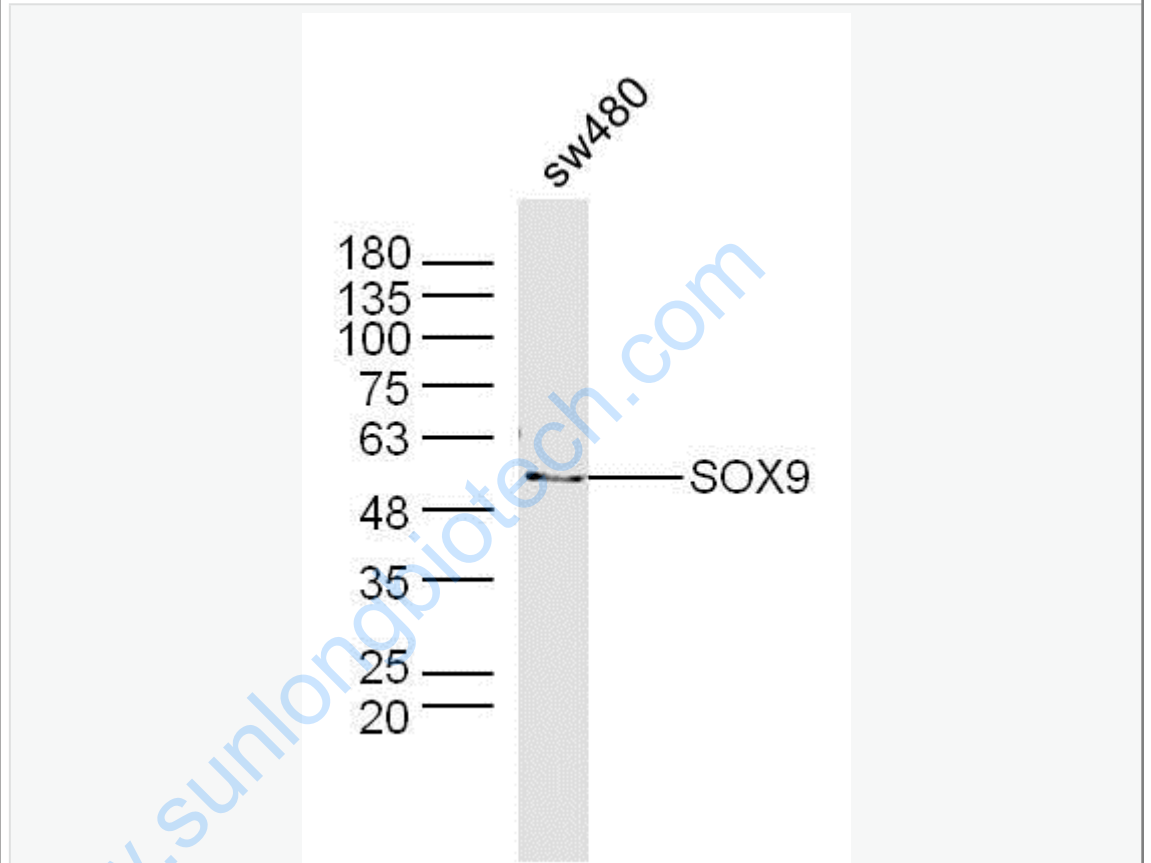
Important Note:

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

????Sox9是软骨形成过程中一个十分关键的转录因子, 已经有研究表明骨形成蛋白

2(bone morphogenetic protein 2,BMP2)能诱导Sox9的表达。
????有学者认为;Sox9蛋白很可能与椎间盘退变有着密切的关系, Sox9是Collagen protein合成过程中的一个重要的转录因子,且在软骨的发育、成熟过程中对Collagen protein有着正向调控作用, Sox9蛋白在男性性腺调节睾丸发育中也有一定的作用。

Picture:



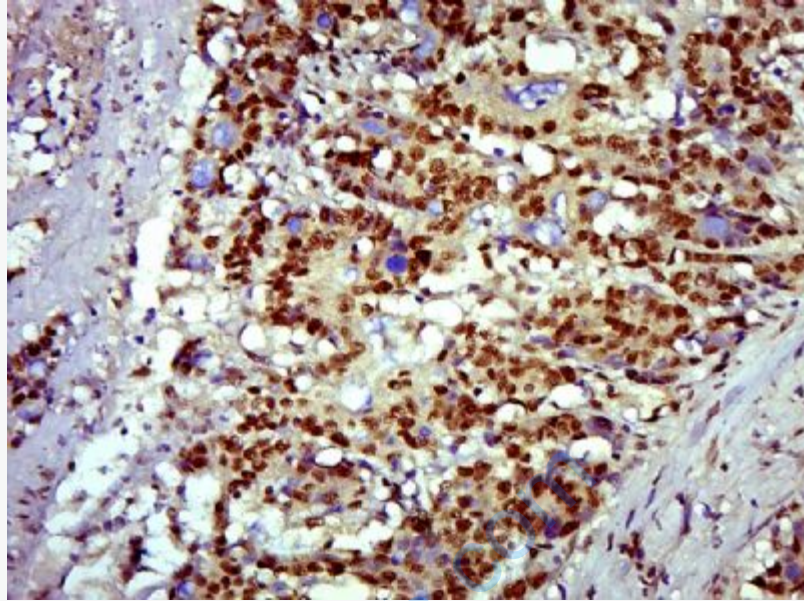
Sample: SW480 Cell (Human) Lysate at 40 ug

Primary: Anti- SOX9 (SL4177R) at 1/300 dilution

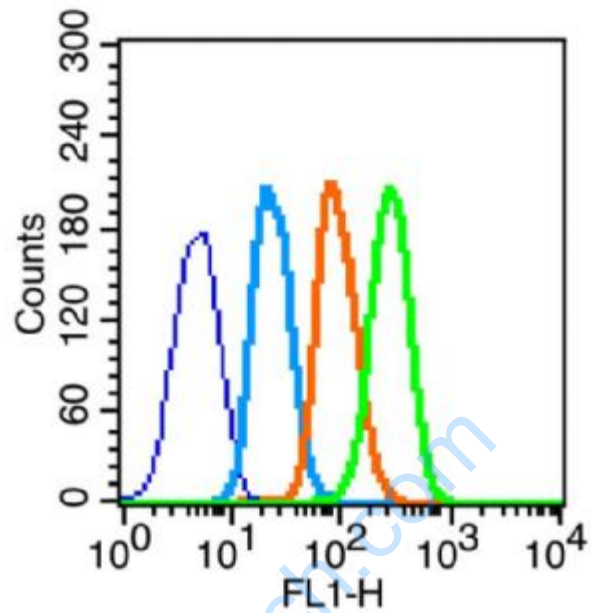
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

Observed band size: 56 kD



Paraformaldehyde-fixed, paraffin embedded (Human colon carcinoma); 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 (SOX9) Polyclonal Antibody, Unconjugated (SL4177R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control (blue line): U251 (fixed with 2% paraformaldehyde (10 min , then permeabilized) with 90% ice-cold methanol for 20 min on ice).

Primary Antibody (green line): Rabbit Anti- SOX9 antibody (SL4177R),dilution: 1 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE,Dilution: 1 μ g /test.