

Product Name: Sox-9 Rabbit Polyclonal Antibody**Catalog #: APRab18144**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Molecular Weight	65kDa

Antigen Information

Gene Name	SOX9
Alternative Names	SOX9; Transcription factor SOX-9
Gene ID	6662.0
SwissProt ID	P48436
Immunogen	The antiserum was produced against synthesized peptide derived from human SOX9. AA range:147-196

Background

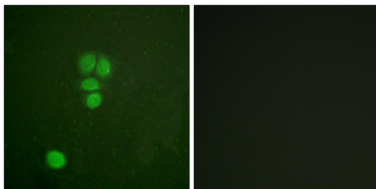
SRY-box 9(SOX9) Homo sapiens The protein encoded by this gene recognizes the sequence CCTTGAG along with other

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, Jul 2008],disease: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.,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.,similarity:Contains 1 HMG box DNA-binding domain.,

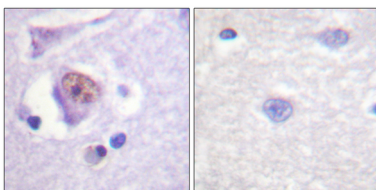
Research Area

Epigenetics and Nuclear Signaling; Transcription; Domain Families; HMG Box; Neuroscience; Neurology process; Neurogenesis; Developmental Families; Stem Cells; Lineage Markers; Ectoderm; Neural Stem Cells; Intracellular; Mesenchymal Stem Cells; Chondrogenesis; Neural Crest Stem Cells; Developmental Biology; Reproduction; Sex determination; Placental development; Lineage specification; Ectoderm; Organogenesis; Skeletal development; Bone

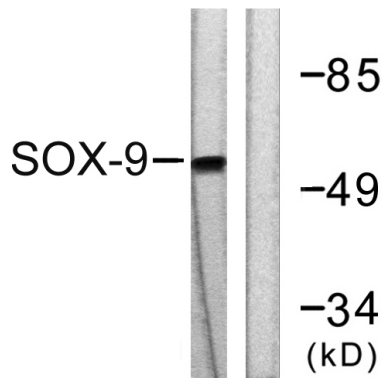
Image Data



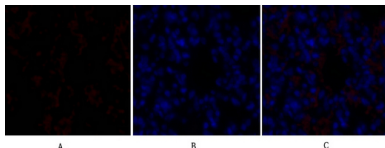
Immunofluorescence analysis of A549 cells, using SOX9 Antibody. The picture on the right is blocked with the synthesized peptide.



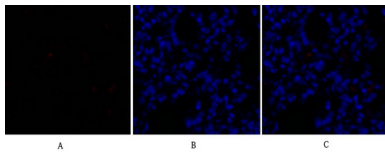
Immunohistochemistry analysis of paraffin-embedded human brain tissue, using SOX9 Antibody. The picture on the right is blocked with the synthesized peptide.



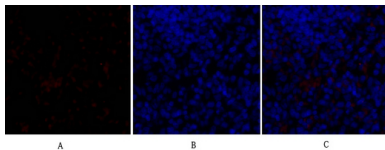
Western blot analysis of lysates from 293 cells, treated with PBS 60', using SOX9 Antibody. The lane on the right is blocked with the synthesized peptide.



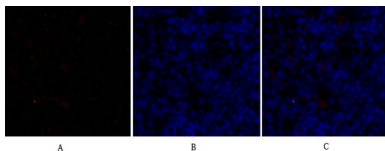
Immunofluorescence analysis of rat-lung tissue. 1, Sox-9 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



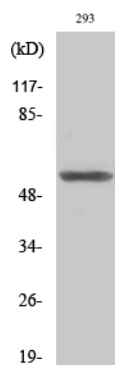
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Immunofluorescence analysis of rat-spleen tissue. 1, Sox-9 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of rat-spleen tissue. 1, Sox-9 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Western Blot analysis of various cells using Sox-9 Polyclonal Antibody diluted at 1:2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).