

Anti-SOX6 Antibody

Catalog # AP53872

Product Information

Application	WB, IHC, CHIP
Primary Accession	P35712
Reactivity	Human, Mouse, Rat, Pig, Bovine, Dog, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	91921

Additional Information

Gene ID	55553
Other Names	Transcription factor SOX-6
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human SOX6. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1/50 - 1/200 CHIP~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SOX6 {ECO:0000303 PubMed:11255018, ECO:0000312 HGNC:HGNC:16421}
Function	Transcription factor that plays a key role in several developmental processes, including neurogenesis, chondrocytes differentiation and cartilage formation (Probable). Specifically binds the 5'-AACAAT-3' DNA motif present in enhancers and super-enhancers and promotes expression of genes important for chondrogenesis. Required for overt chondrogenesis when condensed prechondrocytes differentiate into early stage chondrocytes: SOX5 and SOX6 cooperatively bind with SOX9 on active enhancers and super-enhancers associated with cartilage-specific genes, and thereby potentiate SOX9's ability to transactivate. Not involved in precartilaginous condensation, the first step in chondrogenesis, during which skeletal progenitors differentiate into prechondrocytes. Together with SOX5, required to form and maintain a pool of highly proliferating chondroblasts between epiphyses and metaphyses, to form columnar chondroblasts, delay chondrocyte prehypertrophy but promote hypertrophy, and to delay terminal differentiation of chondrocytes on contact with ossification fronts. Binds to the proximal promoter region of the myelin protein MPZ gene, and is thereby involved in the differentiation of

oligodendroglia in the developing spinal tube. Binds to the gene promoter of MBP and acts as a transcriptional repressor (By similarity).

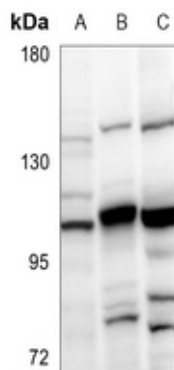
Cellular Location

Nucleus {ECO:0000255 | PROSITE-ProRule:PRU00267, ECO:0000269 | PubMed:16442531}. Cytoplasm {ECO:0000250 | UniProtKB:P40645}

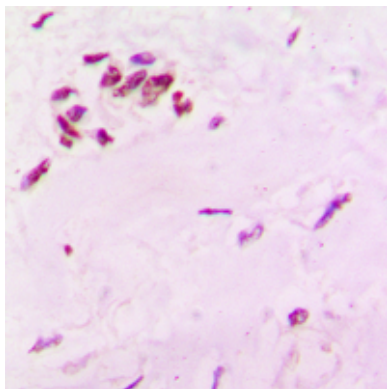
Tissue Location

Expressed in a wide variety of tissues, most abundantly in skeletal musclen.

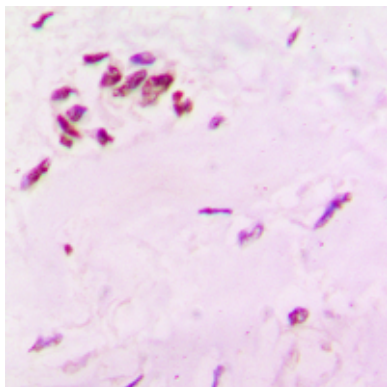
Images



Western blot analysis of SOX6 expression in A549 (A), C6 (B), SP20 (C) whole cell lysates. (Predicted band size: 88; 89; 91 kD; Observed band size: 110 kD)



Immunohistochemical analysis of SOX6 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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