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TBX6 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12063c

Product Information

Application	WB, IF, E
Primary Accession	O95947
Other Accession	D3ZJK7, P70327, E1BEA8, NP_004599.2
Reactivity	Human, Mouse, Rat
Predicted	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14142
Calculated MW	47045
Antigen Region	264-293

Additional Information

Gene ID	6911
Other Names	T-box transcription factor TBX6, T-box protein 6, TBX6
Target/Specificity	This TBX6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 264-293 amino acids from the Central region of human TBX6.
Dilution	WB~~1:1000 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TBX6 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TBX6
Function	T-box transcription factor that plays an essential role in the determination of the fate of axial stem cells: neural vs mesodermal. Acts in part by down-regulating, a specific enhancer (N1) of SOX2, to inhibit neural

development. Seems to play also an essential role in left/right axis determination and acts through effects on Notch signaling around the node as well as through an effect on the morphology and motility of the nodal cilia (By similarity).

Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00201}.

Tissue Location Expressed in fetal tail bud, posterior spinal tissue, intervertebral disk and testis. Also expressed in adult testis, kidney, lung, muscle and thymus

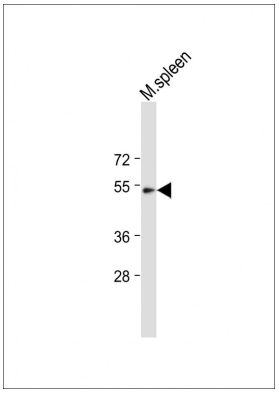
Background

This gene is a member of a phylogenetically conserved family of genes that share a common DNA-binding domain, the T-box. T-box genes encode transcription factors involved in the regulation of developmental processes. Knockout studies in mice indicate that this gene is important for specification of paraxial mesoderm structures.

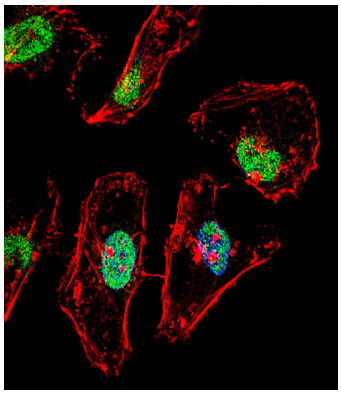
References

Fei, Q., et al. Spine 35(9):983-988(2010)
Ghebranious, N., et al. J. Bone Miner. Res. 23(10):1576-1583(2008)
Farin, H.F., et al. J. Biol. Chem. 282(35):25748-25759(2007)
Papapetrou, C., et al. Genomics 55(2):238-241(1999)
Yi, C.H., et al. Genomics 55(1):10-20(1999)

Images



Anti-TBX6 Antibody (Center) at 1:500 dilution + Mouse spleen tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Fluorescent confocal image of Hela cell stained with TBX6 Antibody (Center)(Cat#AP12063c). Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with TBX6 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 µg/ml, 10 min). TBX6 immunoreactivity is localized to nucleus significantly.