

#### **TBX6 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12063c

#### Specification

# **TBX6 Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IF, WB,E <u>O95947</u> D3ZJK7, P70327, E1BEA8, NP\_004599.2 Human, Mouse Bovine, Rat Rabbit Polyclonal Rabbit IgG 47045 264-293

## TBX6 Antibody (Center) - 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** IF~~1:10~50 WB~~1:500

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.

# **TBX6 Antibody (Center) - 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}.

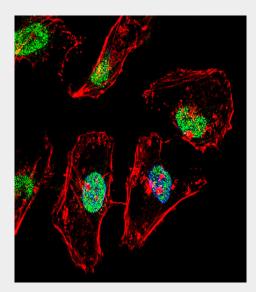
Tissue Location

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

#### **TBX6 Antibody (Center) - Protocols**

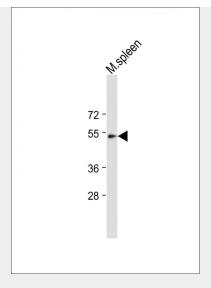
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **TBX6 Antibody (Center) Images**



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  $\mu$ g/ml, 10 min). TBX6 immunoreactivity is localized to nucleus significantly.





Anti-TBX6 Antibody (Center) at 1:500 dilution + Mouse spleen tissue lysate Lysates/proteins at 20  $\mu$ g 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.

# **TBX6 Antibody (Center) - 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.

# **TBX6 Antibody (Center) - 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)