

#### **TBX3 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14976c

#### Specification

## **TBX3 Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O15119</u> <u>NP\_057653.3</u>, <u>NP\_005987.3</u> Human Rabbit Polyclonal Rabbit IgG 79389 310-338

#### TBX3 Antibody (Center) - Additional Information

Gene ID 6926

Other Names T-box transcription factor TBX3, T-box protein 3, TBX3

Target/Specificity

This TBX3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 310-338 amino acids from the Central region of human TBX3.

Dilution WB~~1:1000

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** TBX3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## TBX3 Antibody (Center) - Protein Information

Name TBX3

**Function** Transcriptional repressor involved in developmental processes (PubMed:<u>10468588</u>). Binds to the palindromic T site 5'- TTCACACCTAGGTGTGAA-3' DNA sequence, or a half-site, which



are present in the regulatory region of several genes (PubMed:<u>12000749</u>). Probably plays a role in limb pattern formation (PubMed:<u>10468588</u>). Required for mammary placode induction, and maintenance of the mammary buds during development (By similarity). Involved in branching morphogenesis in both developing lungs and adult mammary glands, via negative modulation of target genes; acting redundantly with TBX2 (By similarity). Required, together with TBX2, to maintain cell proliferation in the embryonic lung mesenchyme; perhaps acting downstream of SHH, BMP and TGFbeta signaling (By similarity). Involved in modulating early inner ear development, acting independently of, and also redundantly with, TBX2 in different subregions of the developing ear (By similarity). Acts as a negative regulator of PML function in cellular senescence (PubMed:<u>22002537</u>).

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

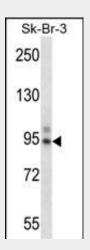
Tissue Location Widely expressed.

## **TBX3 Antibody (Center) - Protocols**

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# TBX3 Antibody (Center) - Images



TBX3 Antibody (Center) (Cat. #AP14976c) western blot analysis in SK-BR-3 cell line lysates (35ug/lane).This demonstrates the TBX3 antibody detected the TBX3 protein (arrow).

## **TBX3 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. This protein is a transcriptional repressor and is thought to play a role in the anterior/posterior axis of the tetrapod forelimb. Mutations in this gene cause ulnar-mammary syndrome, affecting limb, apocrine gland, tooth, hair, and genital development. Alternative splicing of this gene results in three transcript variants encoding different isoforms; however, the full length nature of one variant has not been determined.

#### **TBX3 Antibody (Center) - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Hong, K.W., et al. J. Hum. Genet. 55(6):336-341(2010) Christoffels, V.M., et al. Circ. Res. 106(2):240-254(2010) Pfeufer, A., et al. Nat. Genet. 42(2):153-159(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)