

TBX1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP9383b

Specification

TBX1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

043435

TBX1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 6899

Other Names

T-box transcription factor TBX1, T-box protein 1, Testis-specific T-box protein, TBX1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TBX1 Antibody (C-term) Blocking Peptide - Protein Information

Name TBX1 {ECO:0000303|PubMed:9268629, ECO:0000312|HGNC:HGNC:11592}

Function

Transcription factor that plays a key role in cardiovascular development by promoting pharyngeal arch segmentation during embryonic development (By similarity). Also involved in craniofacial muscle development (By similarity). Together with NKX2-5, acts as a regulator of asymmetric cardiac morphogenesis by promoting expression of PITX2 (By similarity). Acts upstream of TBX1 for the formation of the thymus and parathyroid glands from the third pharyngeal pouch (By similarity). Required for hair follicle stem cell self-renewal (By similarity). Binds to the palindromic T site 5'-TTCACACCTAGGTGTGAA-3' DNA sequence (PubMed:11111039, PubMed:22095455).

Cellular Location

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

TBX1 Antibody (C-term) Blocking Peptide - Protocols

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



• Blocking Peptides

TBX1 Antibody (C-term) Blocking Peptide - Images

TBX1 Antibody (C-term) Blocking Peptide - Background

TBX1 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 gene product shares 98% amino acid sequence identity with the mouse ortholog. DiGeorge syndrome (DGS)/velocardiofacial syndrome (VCFS), a common congenital disorder characterized by neural-crest-related developmental defects, has been associated with deletions of chromosome 22q11.2, where this gene has been mapped. Studies using mouse models of DiGeorge syndrome suggest a major role for this gene in the molecular etiology of DGS/VCFS. Several alternatively spliced transcript variants encoding different isoforms have been described for this gene.

TBX1 Antibody (C-term) Blocking Peptide - References

Fernando, R.I., et al. J. Clin. Invest. 120(2):533-544(2010)Heike, C.L., et al. Birth Defects Res. Part A Clin. Mol. Teratol. 88(1):54-63(2010)Beaujard, M.P., et al. Eur J Med Genet 52(5):321-327(2009)Shalaby, A.A., et al. Mod. Pathol. 22(8):996-1005(2009)Yamagishi, H., et al. Genes Dev. 17(2):269-281(2003)Gong, W., et al. J. Med. Genet. 38 (12), E45 (2001):