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Product datasheet for SC305810

TBX1 (NM_080647) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TBX1 (NM_080647) Human Untagged Clone
Tag:	Tag Free
Symbol:	TBX1
Synonyms:	CAFS; CATCH22; CTHM; DGCR; DGS; DORV; TBX1C; TGA; VCF; VCFS
Mammalian Cell Selection:	None
Vector:	pCMV6-XL6
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene sequence for NM_080647 edited
ATGCACTTCAGCACCGTCACCAGGGACATGGAAGCCTTCACGGCCAGCAGCCTGAGCAGC
CTGGGGGCCGCGGGGGGCTTCCCGGGCGCCGCGTCGCCCGGCGCCGACCCGTACGGCCCG
CGCGAGCCCCCGCCGCCGCCGCGCTACGACCCGTGCGCCGCCGCCGCCCCCGGCGCCCCG
GGTCCGCCGCCGCCGCCGCACGCCTACCCGTTTGCGCCGGCCGCCGGGGCCGCCACCAGC
GCCGCCGCCGAGCCCGAGGGCCCCGGGGCCAGCTGCGCGGCCGCAGCCAAGGCGCCGGTG
AAGAAGAACGCGAAGGTGGCCGGTGTGAGCGTGCAGCTAGAGATGAAGGCGCTGTGGGAC
GAGTTCAACCAGCTGGGCACCGAGATGATCGTCACCAAGGCCGGCAGGCGGATGTTTCCC
ACCTTCCAAGTGAAGCTCTTCGGCATGGATCCCATGGCCGACTATATGCTGCTCATGGAC
TTCGTGCCGGTGGACGATAAGCGCTACCGGTACGCCTTCCACAGCTCCTCCTGGCTGGTG
GCGGGGAAGGCCGACCCTGCCACGCCAGGCCGCGTGCACTACCACCCGGACTCGCCTGCC
AAGGGCGCGCAGTGGATGAAGCAAATCGTGTCCTTCGACAAGCTCAAGCTGACCAACAAC
TTACTGGACGACAACGGCCACATTATTCTGAATTCCATGCACAGATACCAGCCCCGCTTC
CACGTGGTCTATGTGGACCCACGCAAAGATAGCGAGAAATATGCCGAGGAGAACTTCAAA
ACCTTTGTGTTCGAGGAGACACGATTCACCGCGGTCACTGCCTACCAGAACCATCGGATC
ACGCAGCTCAAGATTGCCAGCAATCCCTTCGCGAAAGGCTTCCGGGACTGTGACCCTGAG
GACTGGCCCCGGAACCACCGGCCCGGCGCACTGCCGCTCATGAGCGCCTTCGCGCGCTCG
CGGAACCCCGTGGCTTCCCCGACGCAGCCCAGCGGCACGGAGAAAGACGCGGCTGAGGCC
CGGCGAGAATTCCAGCGCGACGCGGGCGGGCCAGCGGTGCTCGGGGACCCGGCGCATCCT
CCGCAGCTGCTGGCCCGGGTGCTAAGCCCCTCGCTGCCCGGGGCCGGCGGCGCCGGCGGC
TTAGTCCCGCTGCCCGGCGCGCCCGGAGGCCGGCCCAGTCCCCCGAACCCCGAGCTGCGC
CTGGAGGCGCCCGGCGCATCGGAGCCGCTGCACCACCACCCCTACAAATATCCGGCCGCC
GCCTACGACCACTATCTCGGGGCCAAGAGCCGGCCGGCGCCCTACCCGCTGCCCGGCCTG
CGTGGCCACGGCTACCACCCGCACGGGCATCCGCACCACCACCACCACCCCGTGAGTCCA
GCCGCCGCGGCCGCCGCCGCCGCTGCCGCAGCTGCCGCGGCCGCCAACATGTACTCGTCG
GCCGGAGCCGCGCCGCCCGGCTCCTACGACTATTGCCCCAGATAACACGGGCCCTGTCGC
GCTCCCGCCCCGGTCCTGCACAGCCCCGAAGTTCGCCGGGCCCGGCCACCCTGCCCCAAG
GGCAAGCAAGGAATACGTTCCCCCAGCCCCAGGGGCCACCGCGGCTCTCCCCTTCCCCAG
CCTCGAAGCCATGGGGGCCCCCTCGCCACCCCCAGCCCCTTGGGCTATCGAAGTATCCGG
TTCCCCAGTCCCTGGAGCCACCGCGGGTCCTTCCCCGGCCCCGAGGGCCAAGGGGGTCCC
CGCCCGCCAGTGCCAAAGCGCCCGGTCGGAGGCGGAAGGAAGTGATATTTATTGTTCTCC
CCGAGACCGCGTCGCCCGCGGCCCGGCCGGCAGTTGCAGTGTAGACAGCCCGAGAGCCCC
GCCTGCAGGCGGTGTAGATACATGTAGATACTGTAGATACTGTAGATACCGCCCCGGCGC
CGACTTGATAAACGGTTTCGCCTCTTTTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_080647 unedited
GGGTTACCATTTGNTAATACGACTCACTATAGGGCGGCCGCGATTCAGATCTGGTACCAT
GCACTTCAGCACCGTCACCAGGGACATGGAAGCCTTCACGGCCAGCAGCCTGAGCAGCCT
GGGGGCCGCGGGGGGCTTCCCGGGCGCCGCGTCGCCCGGCGCCGACCCGTACGGCCCGCG
CGAGCCCCCGCCGCCGCCGCGCTACGACCCGTGCGCCGCCGCCGCCCCCGGCGCCCCGGG
TCCGCCGCCGCCGCCGCACGCCTACCCGTTTGCGCCGGCCGCCGGGGCCGCCACCAGCGC
CGCCGCCGAGCCCGAGGGCCCCGGGGCCAGCTGCGCGGCCGCAGCCAAGGCGCCGGTGAA
GAAGAACGCGAAGGTGGCCGGTGTGAGCGTGCAGCTAGAGATGAAGGCGCTGTGGGACGA
GTTCAACCAGCTGGGCACCGAGATGATCGTCACCAAGGCCGGCAGGCGGATGTTTCCCAC
CTTCCAAGTGAAGCTCTTCGGCATGGATCCCATGGCCGACTATATGCTGCTCATGGACTT
CGTGCCGGTGGACGATAAGCGCTACCGGTCCCCCTCCACAGCTCCTCCTGGCTGGTGGCG
GGAATGCCGACCCTGGCACGCCAGGCCCGGTGCCCTACCACCCGGACTTCGCTGGCAAGG
GCGCGCATGGGATGAAGCAAATGTGGTCTTCACAAGCTCAAGCGGACCACAACCTTATGG
ACAACAACGGCCACATATCTCGAATTCAAGCCCAATTCCCACCCCCTTTCCCGTGGTCTA
TGGGGACCCCCCCAAAATAGCCAGAATATGCCGAGGAGAAATTAAACCCTTTGTCTCAAGG
AAACCATTTAACCGGGGACTGGCCTCCAAAACCTTGGATTCCCCCCCTTAATTGGCCGCA
ATCC

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_080647 unedited
ACATGGNGATGGCACTTCAGGCCAGGAGGCACTGGGGAGGGTCACAGGGTGCCACCCGGG
ATCTGTTAGAAACAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTT
TTTTTTTTTTTTTCCAAAAGAGGCGAAACCGTTTATCAAGTCGGCGCCGGGGCGGTATCT
ACAGTATCTACAGTATCTACATGTATCTACACCGCCTGCAGGCGGGGCTCTCGGGCTGTC
TACACTGCAACTGCCGGCCGGGCCGCGGGCGACGCGGTCTCGGGGAGAACAATAAATATC
ACTTCCTTCCGCCTCCGACCGGGCGCTTTGGCACTGGCGGGCGGGGACCCCCTTGGCCCT
CGGGGCCGGGGAAGGACCCGCGGTGGCTCCAGGGACTGGGGAACCGGATACTTCGATAGC
CCAAGGGGCTGGGGGTGGCGAGGGGGCCCCCATGGCTTCNAGGCTGGGGAAGGGGAGAGC
CGCGGTGGCCCCTGGGGCTGGGGGAACGTATTCCTTGCTTGCCCTTGGGGCAGGGTGGCC
GGGCCCGGCGAACTTCGGGGCTGTGCAGGACCGGGGCGGGAGCGCGACAGGGCCCGTGTT
ATCTGGGGCAATAGTCGTAGGAGCCGGGCGGCGCGGCTCCGGCCGACGAGTACATGTTGG
CGGCCGCGGCAGCTGCGGCAGCGGCGGCGGCGGCCGCGGCGGCTGGACTCACGGNGTGGT
GGTGGTGGTGCGGATGCCCGTGCGGGTGGTAGCCGTGGCCACGCAGGCCGGGCAGCGGGT
AGGGCGCCCGCCCGCTCTTTGCCCCAAGATAGTGGTCGTAGGCCGCCGCCGGATTTTTTA
GGGGTGGTGGTGCAACGGCTTCCATTGCCCGGGCGGCTCCAGCCCCACTTGGGGTTCCGG
GGACTGGGCCGG
```

Restriction Sites: Please inquire

ACCN: NM_080647

Insert Size: 2000 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: There is 2 nucleotide difference between the OriGene clone and the NCBI reference ORF. These result in the substitution of 1 aa and deletion of 1 aa.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM_080647.1, NP_542378.1

RefSeq Size: 2082 bp

RefSeq ORF: 1488 bp

Locus ID: 6899

UniProt ID: O43435

Cytogenetics: 22q11.21

Protein Families: Transcription Factors

Gene Summary: 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 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. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (C) encodes the longest isoform (C) with the same N-terminal 336 aa, but an unique C-terminus with respect to isoforms A and B.