

Product datasheet for **SC109827**

TBX3 (NM_016569) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TBX3 (NM_016569) Human Untagged Clone
Tag:	Tag Free
Symbol:	TBX3
Synonyms:	TBX3-ISO; UMS; XHL
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC109827 sequence for NM_016569 edited (data generated by NextGen Sequencing)

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ATGAGCCTCTCCATGAGAGATCCGGTCATTCTGGGACAAGCATGGCCTACCATCCGTTT
CTACCTCACCGGGCGCCGGACTTCGCCATGAGCGCGGTGCTGGGTACCAGCCGCGTTC
TTCCCCGCGCTGACGCTGCCTCCCAACGGCGCGGCGGCTCTCGCTGCCGGGCGCCCTG
GCCAAGCCGATCATGGATCAATTGGTGGGGCGGCGGAGACCCGGCATCCCGTTCTCTCC
CTGGGGCCCAAGCGCATCTGAGGCCTTTGAAGACCATGGAGCCCGAAGAAGAGGTGGAG
GACGACCCCAAGGTGCACCTGGAGGCTAAAGAACTTTGGGATCAGTTTACAAGCGGGG
ACCGAGATGGTCATTACCAAGTCGGGAAGGCGAATGTTTCTCCATTTAAAGTGAGATGT
TCTGGGCTGGATAAAAAAGCAAATACATTTTATTGATGGACATTATAGCTGCTGATGAC
TGTCGTTATAAATTTACAATTCTCGGTGGATGGTGGCTGGTAAGGCCGACCCCGAAATG
CCAAAGAGGATGTACATTCACCCGGACAGCCCGCTACTGGGAACAGTGGATGTCCAAA
GTCGCTACTTTCCACAACTGAACTCACCAACAACATTTAGACAAACATGGATTTACT
TTGNNNTCCCAAGTGATCAGCTACGTGGCAGGGGAATTATAGTTTTGGTACTCAGACT
ATATTGAACTCCATGCACAAATACCAGCCCGGTTCCACATTGTAAGAGCCAATGACATC
TTGAAACTCCCTTATAGTACATTTCCGGACATACTTGTTCCCGAAACTGAATTCATCGCT
GTGACTGCATACCAGAATGATAAGATAACCCAGTTAAAAATAGACAACAACCCCTTTTGA
AAAGGTTTCCGGGACACTGAAAATGGCCGAAGAGAAAAAGAAAACAGCTCACCTGCAG
TCCATGAGGGTGTGATGAAAGACAAAAAGGAGAATGGGACCTCTGATGAGTCCCTC
AGTGAACAAGCAGCTTCAACTGCTTCGCCAGGCTTCTTCTCCAGCCGCTCCACTGTA
GGGACATCGAACCTCAAAGATTTATGTCCAGCGAGGGTGAGAGCGACGCCGAGGCCGAG
AGCAAAGAGGAGCATGGCCCCGAGGCTGCGACGCGGCAAGATCTCCACCACCGTCCG
GAGGAGCCCTGCCGTGACAAGGGCAGCCCGCGGTCAAGGCTCACCTTTTCGCTGCTGAG
CGGCCCGGACAGCGGGCGGCTGGACAAAGCGTCGCCCGACTCACGCCATAGCCCCGCC
ACCATCTCGTCCAGCACTCGCGGCTGGGCGGAGGAGCGCAGGAGCCCGGTTCCGCGAG
GGCACAGCGCCGCAAGGTGGAAGAGGCGCGCGCTCCCGGCAAGGAGGCCTTCGCG
CCGCTCACGGTGCAGACGGACGCGGCGCGCACCTGGCCAGGGCCCCCTGCCTGGC
CTCGGTTTCGCCCGGGCTGGCGGGCCAAAGTTCTTCAACGGGCACCCGCTCTTCTG
CACCCAGCCAGTTTGCCATGGGGGCGCCTTCTCCAGCATGGCGGCGCTGGCATGGGT
CCCCTCTGGCCACGGTTTCTGGGGCTCCACCGGTGCTCGGGCTGGATTCCACGGCC
ATGGCCTCTGCCGCTGCGGCGCAGGGACTGTCCGGGGCTCCGCGGCCACCTGCCCTTC
CACCTCCAGCAGCAGTCTGGCCTCTCAGGGCTGGCCATGTCCCTTTTCGGAAGCCTG
TTCCCTTACCCCTACACGTACATGGCCGACGCGCGGCCCTCTCTGCGGCAGCTCC
AGCTCGGTGCACCGCCACCCCTTCTCAATCTGAACACCATGCGCCCGCGGCTGCGCTAC
AGCCCCTACTCCATCCCGGTGCCGTCCCGGACGGCAGCAGTCTGCTCACCACCGCCCTG
CCCTCCATGGCGGCGGCCGCGGGGCCCTGGACGGCAAAGTGCAGCCCTGGCCGCCAGC
CCGGCCTCGGTGGCAGTGGACTCGGGCTCTGAACTCAACAGCCGCTCCTCCACGCTCTC
TCCAGCTCCATGTCTTGTGCCCAAACCTGCGCGGAGAAAGAGGCGGCCACCAGCGAA
CTGCAGAGCATCCAGCGTTGGTTAGCGGCTTGAAGCCAAGCCGGACAGGTCCCGCAGC
GCGTCCCCGTAG
    
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Clone variation with respect to NM_016569.3
 665 c=>n;666 c=>n;667 t=>n

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_016569 unedited
 TTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCACCAGCGAGAAAGA
 GGAGAGGAAGACAGATAGGGGGCGGGGAAGAAGAAAAAGAAAGTAAAAAGTCTTCTAG
 GAGAACCTTTTACATTTGCAACAAAAGACCTAGGGGCTGGAGAGAGATTCTGGGACGCA
 GGGCTGGAGTGTCTATTTGAGCTCAGCGGCAGGGCTCGGGCGGAGTCGAGACCCTGTCT
 CGCTCCTCTCGCTTCTGAAACCGACGTTTCTGAGAGCGGCTTTTAAAAACGCAAGGCACAA
 GGACGGTACCCCGCGACTATGTTTGTGATTTTTTCGCTTGGCCCTTTTAAAAAGCGGC
 CTCCCATTCCCCAAAAGACACTTCCCCTCCTCCCTTGAAGTGCATTAGTTGTGATTCT
 GCCTCCTTTTTCTTTTTCTTTTTTTTTGTTTTGTTTTTCCCCCTTTTGAATTATGTG
 CTGCTGTTAAACAACAACAAAAACAACAAACACAGCAGCTGCGGACTTGTCCCCGGC
 TGGAGCCAGCGCCCCGCTGGAGTGGATGAGCCTCTCCATGAGAGATCCGGTCAATTCCT
 GGGACAAGCATGGCCTACCATCCGTTCTACCTCACCGGGCGCCGGACTTCGCCATGAGC
 GCGGTGCTGGGTACCAGCCGNCGTTCTCCCCGCGCTGACGCTGCCTCCCAACGGCGCG
 GCGGGCTCTCGCTGNCGGGCGCCCTGGCCAGCCGATCATGGATCAATTGGGGGGGGCG
 GCCGAGACCGGCATCCCCGTCTCTCCCTGGGGCCAGGGCGCATCTGAGCCCTTTGAGACA
 TGGAGCCGANAAAAGGTGGAAGACGACCCAGTGGCACTGGAGCTAAGAACTTGGGGAC
 AGTTTACAAGCGGGGCCGGATGGCATAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_016569 unedited
 CCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTGGTTTTGGTTCCACTTGA
 CACAGTGAAGGAAAAATATATATAAAATCCGCACTGAGGGAGATGTCTTTGAACACCTC
 CCCGCTGGTGGGCAGAGACCCAGACCAGCCTTGTGGAAGTTGCTCTGGACATAAATGT
 TGGAACTCTACCCCAAGTAGCTCAATGCAACCGACGTTTCTGAGCCCCAGAATCTGAT
 CCAGATCCCGGACATATAAACCACGCCAAGAAGACAGGGGCTGTCTTAGCACATTCTCT
 CGAGGGAGTCCGGGGCCCTTCCAGACGCAACTGCAAAAGGAAGGGCTAACGCCATGGC
 GGGCCGAGGTTATTTTATATCCGACAAAGTGCACGGCAGCCTGAACTGGACTGGAATG
 AAAAGACGTGTCTGGGACCGGTCTACGGGGACCTCCGCGGGACCTGCCCGCTTGGCTT
 TCAATCCGCTAACCCCCCGGACGCTCTGTCACTTCTCTGTGCGCCGCTTTTTTCCC
 CCCCCAGAATTCTGTCCACTCAGCCCTTTTCTCTGTTACACCATCGCCCAGTTCTCCC
 TTTTACTTCTCACCCCGTTCCCACTCCCCTATATCTCTGTTCCCTCCCCCTCCACTTTC
 TTTTCCCCTCCCTCTCTCCCCCTCTACTTTTTTATTCACTGATCCCCCTTCTCCCCC
 ACCCGGTATTCCACAACCCATTCTTCTCTCTCCCTATTCCCCCTCCCCCTCCCCA
 CCTCCAANAGTCAATCTCGCATGCCTTCACTCTTCTCACTTCACTTCTCATACCCTCG
 TTTTCTTCCCCTTTTTTACTACTACCCTCCTCTCACTCCTTCTCTTCCGCTCTCCGC
 TCTCCTTATCCTCTGCATATGCTCTCTCTAATCCCCATACCACATTACTC

Restriction Sites:

NotI-NotI

ACCN:

NM_016569

Insert Size:

2600 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

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_016569.3](#), [NP_057653.3](#)

RefSeq Size: 4814 bp

RefSeq ORF: 2232 bp

Locus ID: 6926

UniProt ID: [O15119](#)

Cytogenetics: 12q24.21

Domains: T-box

Protein Families: Druggable Genome, 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 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. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) contains an alternate in-frame exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini and is longer compared to isoform 1.