

Product datasheet for **RC220990**

TBX3 (NM_005996) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TBX3 (NM_005996) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TBX3
Synonyms:	TBX3-ISO; UMS; XHL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC220990 representing NM_005996
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGCCTCTCCATGAGAGATCCGGTCATTCTGGGACAAGCATGGCCTACCATCCGTTCTACCTCACC
 GGGCGCCGGACTTCGCCATGAGCGCGGTGCTGGGTCAACAGCCGCGTTCTTCCCGCGCTGACGCTGCC
 TCCAACGGCGCGCGCGCTCTCGCTGCCGGCGCCCTGGCAAAGCCGATCATGGATCAATTGGTGGGG
 GCGGCCGAGACCGGCATCCCGTTCTCTCCCTGGGGCCCCAGGCGCATCTGAGGCCTTTGAAGACCATGG
 AGCCCCAAGAAGAGGTGGAGGACGACCCCAAGGTGCACCTGGAGGCTAAAGAACTTTGGGATCAGTTTCA
 CAAGCGGGGCACCGAGATGGTCATTACCAAGTCGGGAAGCGAATGTTTCTCCATTTAAAGTGAGATGT
 TCTGGGCTGGATAAAAAAGCCAAATACATTTTATTGATGGACATTATAGCTGCTGATGACTGTCTGTATA
 AATTTACAATTCTCGGTGGATGGTGGTGGTAAGGCCGACCCCGAAATGCCAAAGAGGATGTACATTCA
 CCCGGACAGCCCGCTACTGGGGAACAGTGGATGTCAAAGTCGTCACCTTCCACAACTGAAACTCACC
 AACACATTTTCAGACAAACATGGATTTACTATATTGAACTCCATGCACAAATACAGCCCGGTTCCACA
 TTGTAAGAGCCAATGACATCTTGAAACTCCCTTATAGTACATTTTCGGACATACTTGTCCCGAACTGA
 ATTCATCGCTGTGACTGCATACCAGAATGATAAGATAACCCAGTTAAAAATAGACAACAACCCTTTTGCA
 AAAGGTTTCCGGGACTGGAAATGGCCGAAGAGAAAAAGAAAACAGCTCACCTGCAGTCCATGAGGG
 TGTTTGATGAAAGACACAAAAAGGAGAATGGGACCTCTGATGAGTCTCCAGTGAACAAGCAGCTTTCAA
 CTGCTTCGCCCAGGCTTCTTCTCCAGCCGCTCCACTGTAGGGACATCGAACCTCAAAGATTTATGTCCC
 AGCGAGGGTGAGAGCGACGCCGAGGCCGAGACAAAGAGGAGCATGGCCCCGAGGCTGCGACGCGGCCA
 AGATCTCACACCACCGTCCGAGGAGCCCTGCCGTGACAAGGGCAGCCCCGCGGTCAAGGCTCACCTTTT
 CGCTGTGAGCGGCCCGGGACAGCGGGCGGCTGGACAAAGCGTCGCCGACTCACGCCATAGCCCGCC
 ACCATCTCGTCCAGCACTCGCGGCTGGGCGGGAGGAGCGCAGGAGCCCGGTTTCGCGAGGGCACAGCGC
 CGGCCAAGGTGGAAGAGGCGCGCGCTCCCGGGCAAGGAGGCCTTCGCGCCGCTCACGTTGCAGACGGA
 CGCGGCCCGCGCACCTGGCCAGGGCCCCCTGCCTGGCCTCGGCTTCGCCCGGGCTGGCGGGCCAA
 CAGTTCTCAACGGGCACCCGCTCTTCTGCACCCAGCCAGTTTGCCATGGGGGGCGCCTTCTCCAGCA
 TGGCGGCCGCTGGCATGGGTCCCTCTGGCCACGTTTCTGGGGCTCCACCGGTGTCTCGGGCTGGA
 TTCCACGGCCATGGCCTCTGCCGCTGCGGCGCAGGACTGTCCGGGCGTCCGCGGCCACCTGCCCTTC
 CACCTCCAGCAGCAGTCTGGCCTCTCAGGGCTGGCCATGTCCCTTTCGGAAGCCTGTCCCTTACC
 CCTACAGTACATGGCCGAGCGCGGCCGCTCCTCTGCGGCAGCCTCCAGCTCGGTGCACCGCCACCC
 TTCTCTCAATCTGAACACCATGCGCCCGCGGCTGCGCTACAGCCCTACTCCATCCCGGTGCCGGTCCCG
 GACGGCAGCAGTCTGCTCACCACCGCCCTGCCCTCCATGGCGGGCGCCGCGGGGCCCTGGACGGCAAAG
 TCGCCGCCCTGGCCGCCAGCCCGGCTCGGTGGCAGTGGACTCGGGCTCTGAACTCAACAGCCGCTCCTC
 CACGCTCTCTCCAGTCCATGTCTTGTGCCCCAACTCTGCGCGGAGAAAGAGGGGCCACCAGCGAA
 CTGCAGAGCATCCAGCGGTTGGTTAGCGGCTTGGAAAGCCAAGCCGGACAGGTCCCGCAGCGGTCCCGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220990 representing NM_005996
 Red=Cloning site Green=Tags(s)

MSLSMRDPVIPGTSMAYHPFLPHRAPDFAMSAVLGHQPPFFPAL TLPNGAAALSLPGALAKPIMDQLVG
 AAETGIPFSSSLGPQHLRPLKTMPEEEEEVEDDPKVHLEAKELWDQFHKRGTEMVITKSGRRMFPPFKVRC
 SGLDKKAKYILLMDIIAADDCRYKFHNSRWMVAGKADPEMPKRMYPHDPSPATGEQWMSKVVTFHKLKLT
 NNISDKHGFTILNSMHKYQPRFHIVRANDILKLPYSTFRTYLFPETEFIAVTAYQNDKITQLKIDNNPFA
 KGFRDTGNGRREKRKQLTLQSMRVFDERHKKENGTSESSSEQAAFNCFQAASSPAASTVGTSNLKDLCP
 SEGESDAEAEESKEEHGPEACDAAKISTTTSEEPCRDKGSFAVKAHLFAAERPRDSGRLDKASPSRHS
 PA TISSSTRGLGAEERRSPVREGTAPAKVEEARALPGKEAFAPLTVQTDAAAHLAQGPLPGLGFAPGLAGQ
 QFFNGHPLFLHPSQFAMGGAFSSMAAAGMPLLATVSGASTGVSGLDSTAMASAAAQGLSGASAATLPP
 HLQQHVLAASQGLAMSPFGSLFPYPYTYMAAAAASSAAASSSVHRHPFLNLTMRPRLRYPYSIPVVPV
 DGSSLLTTALPSMAAAGPLDGVAALASPASVAVDSGSELNSRSSTLSSSSMSLSPKLCAEKEAATSE
 LQSIQRLVSGLEAKPDRSRASASP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_005996

ORF Size: 2169 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_005996.4](#)

RefSeq Size: 4754 bp

RefSeq ORF: 2172 bp

Locus ID: 6926

UniProt ID: [O15119](#)

Cytogenetics: 12q24.21

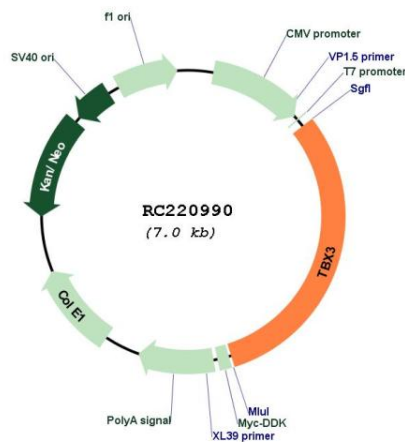
Domains: T-box

Protein Families: Druggable Genome, Transcription Factors

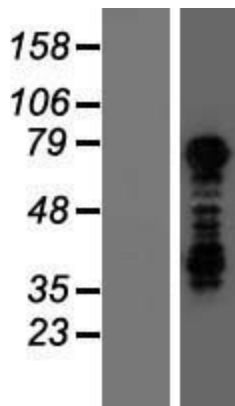
MW: 77 kDa

Gene Summary:

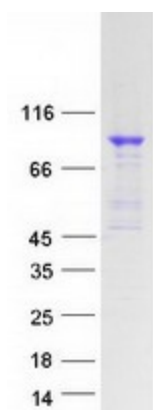
This gene is a member of a phylogenetically conserved family of genes that share a common DNA-binding domain, the T-box. T-box genes encode transcription factors involved in the regulation of developmental processes. This protein is a transcriptional repressor and is thought to play a role in the anterior/posterior 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]

Product images:


Circular map for RC220990



Western blot validation of overexpression lysate (Cat# [LY416941]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220990 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TBX3 protein (Cat# [TP320990]). The protein was produced from HEK293T cells transfected with TBX3 cDNA clone (Cat# RC220990) using MegaTran 2.0 (Cat# [TT210002]).