

Product datasheet for **RC216520**

TBX5 (NM_000192) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TBX5 (NM_000192) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TBX5
Synonyms:	HOS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC216520 representing NM_000192
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGACGACGAGGGCTTTGGCCTGGCGCACGCCTCTGGAGCCTGACGCAAAGACCTGCCCT
 GCGATTCGAAACCGAGAGCGCGCTCGGGCCCCAGCAAGTCCCGTCGTCCCCGAGGCCGCCTTCAC
 CCAGCAGGGCATGGAGGGAATCAAAGTGTTCATGAAAGAGAACTGTGGCTAAAAATCCACGAAGTG
 GGCACGGAATGATCATAACCAAGGCTGGAAGGCGGATGTTTCCAGTTACAAAGTGAAGGTGACGGGCC
 TTAATCCAAAACGAAGTACATTCTTCTCATGGACATTGTACCTGCCGACGATCACAGATACAAATTCGC
 AGATAATAAATGGTCTGTGACGGGCAAAGCTGAGCCCGCCATGCCTGGCCGCTGTACGTGACCCAGAC
 TCCCCCGCCACCGGGCGCATTGGATGAGGCAGCTCGTCTCCTCCAGAACTCAAGCTCACCAACAACC
 ACCTGGACCCATTTGGGCATATTATTCTAAATTCATGCACAAAACCAGCCTAGATTACACATCGTGAA
 AGCGGATGAAAAAATGGATTTGGCTCAAAAAATACAGCGTTCTGCACTCACGTCTTTCCTGAGACTGCG
 TTTATAGCAGTGACTTCTTACCAGAACCACAAGATCACGCAATTAAGATTGAGAATAATCCCTTTGCCA
 AAGGATTCGGGGCAGTGATGACATGGAGCTGCACAGAATGTCAAGAATGCAAAGTAAAGAAATATCCCGT
 GGTCCCCAGGAGCACCGTGAGGCAAAAAGTGGCCTCCAACCACAGTCTTTTCCAGCAGCGAGTCTCGAGCT
 CTCTCCACCTCATCCAATTTGGGGTCCCAATACCAGTGTGAGAATGGTGTTCGGGCCCTCCCAGGACC
 TCCTGCCTCCACCAACCCATACCCACTGCCCCAGGAGCATAGCCAAATTTACCATTGTACCAAGAGGAA
 AGAGGAAGAATGTTCCACCACAGACCATCCCTATAAGAAGCCCTACATGGAGACATACCCAGTGAAGAA
 GATTCCTTCTACCGCTCTAGCTATCCACAGCAGCAGGGCCTGGTGCCTCTACAGGACAGAGTCGGCAC
 AGCGGCAAGCTTGCAATGTATGCCAGCTCTGCGCCCCCAGCGAGCCTGTGCCAGCCTAGAGGACATCAG
 CTGCAACACGTGGCCAAGCATGCCCTTCTACAGCAGCTGCACCGTACCACCGTGCAGCCATGGACAGG
 CTACCCTACCAGCACTTCTCCGCTCACTTCACTCGGGGCCCTGGTCCCTCGGCTGGCTGGCATGGCCA
 ACCATGGCTCCCCACAGCTGGGAGAGGGAATGTTCCAGCACCAGACCTCCGTGGCCACCAGCCTGTGGT
 CAGGCAGTGTGGGCTCAGACTGGCCTGCAGTCCCCTGGCACCCTTACGCCCTGAGTTCCTCTACTCT
 CATGGCGTGCCAAGGACTCTATCCCTCATCAGTACCCTCTGTGCACGGAGTTGGCATGGTGCCAGAGT
 GGAGCGACAATAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216520 representing NM_000192
 Red=Cloning site Green=Tags(s)

MADADEGFGLAHTPLEPDAKDLPCDSKPESALGAPSKSPSSPQAAFTQQGMEGIKVF LHERELWLKFHEV
 GTEMIITKAGRRMFPSYKVKVTGLNPKTKYILLMDIVPADDHRYKFADNKWSVTGKAEPAMPGRLYVHPD
 SPATGAHWMRQLVSFQKLKLTNNHLDPFHGHIILNSMHKYQPR LHIVKADENNGFGSKNTAFCTHVFPETA
 FIAVTSYQNHKITQLKIENPFKGFGRGSDMELHRMSRMSKEYPVVPRSTVRQKVASNHSPFSSESRA
 LSTSSNLGSYQCEGVSGPSQDLLPPPNPYPLPQEHSQIYHCTKRKEEESCSTDHPYKPYMETSPSEE
 DSFYRSSYPQQQLGASyrTESAQRQACMYASSAPPSEPVP SLEDISCNTWPSMPSYSSCTVTTVQPMDR
 LPYQHFSAHFTSGPLVPRLAGMANHGSPQLGEGMFQHTSVAHQPVVRQCGPQTGLQSPGTLQPPEFLYS
 HGVPRTLSPHQYHSVHGVGMVPEWSDNS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6105_f12.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_000192

ORF Size: 1554 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](#)

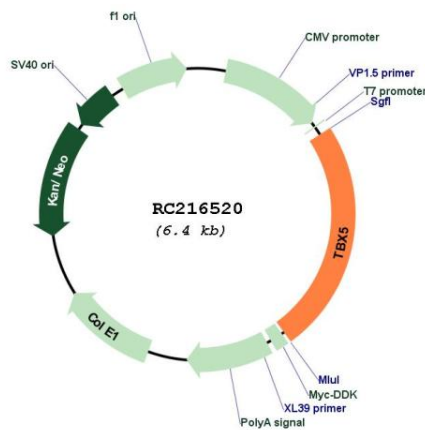
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

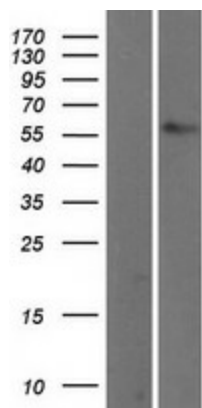
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000192.3 , NP_000183.2
RefSeq Size:	3921 bp
RefSeq ORF:	1557 bp
Locus ID:	6910
UniProt ID:	Q99593
Cytogenetics:	12q24.21
Domains:	T-box
Protein Families:	Druggable Genome, Transcription Factors
MW:	57.5 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 gene is closely linked to related family member T-box 3 (ulnar mammary syndrome) on human chromosome 12. The encoded protein may play a role in heart development and specification of limb identity. Mutations in this gene have been associated with Holt-Oram syndrome, a developmental disorder affecting the heart and upper limbs. Several transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2008]

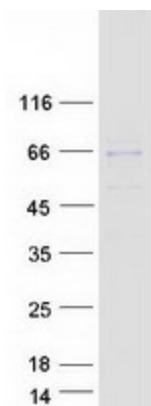
Product images:



Circular map for RC216520



Western blot validation of overexpression lysate (Cat# [LY403620]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC221808] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TBX5 protein (Cat# [TP316520]). The protein was produced from HEK293T cells transfected with TBX5 cDNA clone (Cat# RC216520) using MegaTran 2.0 (Cat# [TT210002]).