

Product datasheet for **RC212412**

TBX20 (NM_001077653) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TBX20 (NM_001077653) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TBX20
Synonyms:	ASD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC212412 representing NM_001077653
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGTTCACGGCGTCCCCAAGCCCCAACTCTCTCCCGGCCAACGCCTTCTCCATTGCCGCGCTCA
 TGTCGAGCGGCGCTCTAAGGAGAAGGAGGCGACGGAGAACAACAATCAAACCCCTGGAGCAATTTGTGGA
 GAAGTCGTCCTGTGCCAGCCCTGGGTGAGCTGACCAGCCTGGATGCTCATGGGAGTTTGGTGGAGGC
 AGTGGCAGCAGCCGTCCTCTCTCTGTGCACTGAGCCACTGATCCCCACCACCCCATCATCCCCA
 GTGAGGAAATGGCCAAAATTGCCTGCAGCCTGGAGACCAAGGAGCTTTGGGACAAATTCATGAGCTGGG
 CACCGAGATGATCATACCAAGTCGGGCAGGAGGATGTTTCCAACCATCCGGGTGCTTTTTCGGGGGTG
 GATCCTGAGGCCAAGTACATAGTCCTGATGGACATCGTCCTGTGGACAACAAGAGGTACCGCTACGCT
 ACCACCGTCTCTGGCTGGTGGCTGGCAAGGCCGACCCGCGTTGCCAGCCAGGCTCTATGTGCATCC
 AGATTCTCTTTTACCGGTGAGCAACTACTCAAACAGATGGTGTCTTTTAAAAGGTGAAACTCACCAAC
 AATGAAGTGGATCAACATGGCCATAAATTTGAACTCAATGCATAAGTACCAGCCAAGGTGCACATCA
 TTAAGAAGAAAGACCACACAGCCTCATTGCTCAACCTGAAGTCTGAAGAATTTAGAACTTTCATCTTTCC
 AGAAACAGTTTTTACGGCAGTCACTGCCTACCAGAATCAACTGATAACGAAGCTGAAAATAGATAGCAAT
 CCTTTTGCCTAAGGATCCGGGATTCCTCCAGGCTCACTGACATTGAGAGGGAAAGTGTGGAGAGCCTGA
 TTCAAAGCATTCTATGCACGCTACCCATCCGTACCTACGGAGGAGAAGAAGATGTCTTGGGGATGA
 GAGTCAGACAACCCAAATCGAGGGTCAGCCTTACAACATCTGATAATTTGTCTCTCAGCTCCTGGGTA
 TCATCTTCTTCCAGTTTCTCGGGTTTCAGCACCCACAGTCCCTGACTGCTCTTGGCACCAGCACAGCAT
 CCATAGCAACACCCATTCTCACCCATCCAGGGTTCTCTGCCACCATATAGCCGACTGGGATGCCTCT
 GACACCATCGGCCATTGCCAGCTCCATGCAAGGAGTGGCCCCACATTCCCTTATTCCACATGCCGCGA
 TACCATCACTATTTTTCAGCAGGGCCCTATGCTGCCATTCAAGGACTACGCCATTCTCTGCTGTGATGA
 CGCCATTTGTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212412 representing NM_001077653
 Red=Cloning site Green=Tags(s)

MEFTASPKPQLSSRANAFSIAALMSSGGSKEKEATENTIKPLEQFVEKSSCAQPLGELTS LDAHGEFGGG
 SGSSPSSSLCTEPLIPTTPIIPSEEMAKIACSLETKELWDKFHELGTMIITKSGRRMFPTIRVSFSGV
 DPEAKYIVLMDIVPVDNKRYRYAYHRSSWL VAGKADPPLPARL YVHPDSPFTGEQLLKQMVSEKVKLTN
 NELDQHGHIILNSMHKYQPRVHI IKKKDHTASLLNLKSEEFRTF IFPETVFTAVTAYQNQLITKLIKIDSN
 PFAKGFDRDSSRLTDIERESVESLIQKHSYARSPIRTYGGEEDVLGDESQTPNRRGSAFTTSDNLSLSSWV
 SSSSFPGFQHPQSLTALGTSTASIATPIPHPIQGSLPPYSRLGMPLTPSAIASSMQSGPTFPFSFHMPR
 YHHYFQQGPYAAIQGLRHSSAVMTPFV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2762_e01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001077653

ORF Size: 1341 bp

OTI Disclaimer: 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_001077653.2](#)

RefSeq Size: 1355 bp

RefSeq ORF: 1344 bp

Locus ID: 57057

UniProt ID: [Q9UMR3](#)

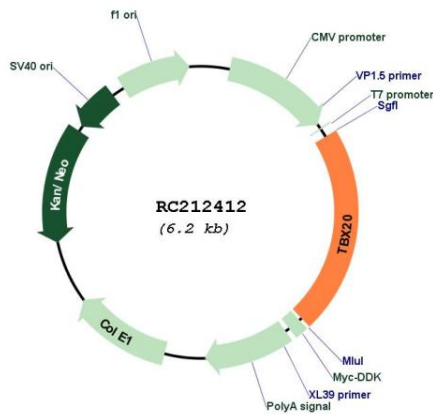
Cytogenetics: 7p14.2

Protein Families: Transcription Factors

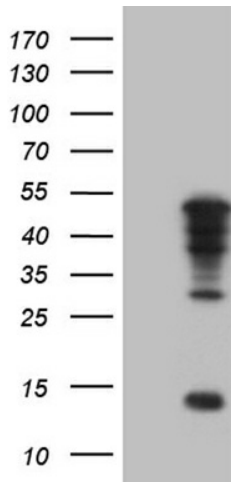
MW: 49.1 kDa

Gene Summary: This gene encodes a T-box family member. The T-box family members share a common DNA binding domain, termed the T-box, and they are transcription factors involved in the regulation of developmental processes. This gene is essential for heart development. Mutations in this gene are associated with diverse cardiac pathologies, including defects in septation, valvulogenesis and cardiomyopathy. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]

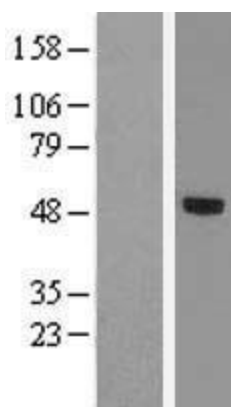
Product images:



Circular map for RC212412



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TBX20 (Cat# RC212412, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TBX20 (Cat# [TA809357])(1:2000). Positive lysates [LY421469] (100ug) and [LC421469] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY421469]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212412 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).