

Product datasheet for **SC322597**

TBX21 (NM_013351) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TBX21 (NM_013351) Human Untagged Clone
Tag:	Tag Free
Symbol:	TBX21
Synonyms:	T-bet; T-PET; TBET; TBLYM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_013351 edited
 GGACGCGTGGGCGAGGGCGTAGAAGCCAGGCGTCAGAGCCGGGCTCCGGTGGGGTCCCC
 CACCCGGCCCTCGGGTCCCCCGCCCTGCTCCCTGCCATCCCAGCCCACGCGACCCCTC
 TCGCGCGGGAGGGGCGGGTCTCGACGGCTACGGGAAGGTGCCAGCCGCCCGGATGG
 GCATCGTGGAGCCGGTTGCGGAGACATGCTGACGGGCACCGAGCCGATGCCGGGAGCG
 ACGAGGGCCGGGCGCCTGGCGCCGACCCGACGACCCGCTACTTCTACCCGGAGCCGGGCG
 CGCAGGACGCGGACGAGCGTCCGCGGGGGGCGCAGCCTGGGGTCTCCCTACCCGGGGGCG
 CCTTGGTGCCCGCCCGCCGAGCCGCTTCTTGGAGCCTACGCCCTACCCGCCGACCCC
 AGGCGGCCGGCTTCCCCGGCGGGGCGAGTCTTCCCGCCGCCGCGGACGCCGAGGGCT
 ACCAGCCGGGCGAGGGCTACGCCGCCCGGACCCGCGCGCCGGGCTTACCCGGGGCCGC
 GTGAGGACTACGCGCTACCCGCGGGACTGGAGGTGTGGGGAACTGAGGGTCCGCGTCA
 ACAACCACCTGTTGTGTCCTCAAGTTAATCAGCACCAGACAGAGATGATCATACCAAGC
 AGGGACGGCGGATGTTCCATTCTGTCACTTACTGTGGCCGGGCTGGAGCCACCAGCC
 ACTACAGGATGTTTGTGACGTGGTCTTGGTGGACCAGCACCCTGGCGTACCAGAGCG
 GCAAGTGGGTGCAGTGTGAAAGGCCGAGGGCAGCATGCCAGAAACCGCTGTACGTCC
 ACCCGGACTCCCCAACACAGGAGCGCACTGGATGCGCCAGGAAGTTTCATTTGGGAAAC
 TAAAGCTCACAAACAACAAGGGGCGTCCAACAATGTGACCCAGATGATTGTGCTCCAGT
 CCCTCCATAAGTACCAGCCCGGCTGCATATCGTTGAGGTGAACGACGGAGAGCCAGAGG
 CAGCCTGCAACGCTTCCAACACGCATATCTTTACTTTCCAAGAAACCCAGTTCATTGCCG
 TGACTGCCTACCAGAATGCCGAGATTACTCAGTGAAAATTGATAATAACCCCTTTGCCA
 AAGGATTCGGGAGAAGTTTGTAGTCCATGTACACATCTGTTGACACCAGCATCCCCTCCC
 CGCCTGGACCCAACTGTCAATTCCTTGGGGGAGATCACTACTCTCTCTCTACCCAACC
 AGTATCCTGTTCCAGCGCTTCTACCCGACCTTCTGGCCAGGCGAAGGATGTGGTTC
 CCCAGGCTTACTGGCTGGGGGCCCCCGGGACACAGTATGAGGCTGAGTTTCGAGCAG
 TCAGCATGAAGCCTGCATTCTTGCCTCTGCCCTGGGCCACCATGTCTACTACCGAG
 GCCAGGAGGCTCTGGCACCTGGAGCTGGCTGGCCTGTGGCACCCAGTACCCTCCCAAGA
 TGGGCCCGGCCAGCTGGTCCGCCCTATGCGGACTCTGCCATGGAACCCGGCCCTGGAG
 GCTCAGAGGGACGGGACCAGAGGACCAGGGTCCCCCTTGGTGTGGACTGAGATTGCC
 CCATCCGCCCGAATCCAGTGATTCAGGACTGGGCGAAGGAGACTCTAAGAGGAGCGCG
 TGTCCCTATCCTTCCAGTGGTACAGCTCCTCCCTGCTGGGGCCCTTCTCCTTTTG
 ATAAGGAAGCTGAAGGACAGTTTATAACTATTTCCCAACTGAGCAGATGACATGATGA
 AAGGAACAGAAACAGTGTATTAGGTTGGAGGACACCGACTAATTTGGGAAACGGATGAA
 GGACTGAGAAGGCCCCCGCTCCCTCTGGCCCTTCTGTTTAGTAGTTGGTTGGGAAAGT
 GGGGCTCAAGAAGGATTTTGGGGTTCACCAGATGCTTCTGGCCACGATGAAACCTGAG
 AGGGGTGTCCCCTTGCCCATCCTCTGCCCTAACTACAGTCGTTTACCTGGTGTGCGTC
 TTGCTTTTGGTTCCAGCTGGAGAAAAGAAGACAAGAAAGTCTTGGGCATGAAGGAGCTT
 TTTGCATCTAGTGGTGGGAGGGGTGAGGTGTGGGACATGGGAGCAGGAGACTCCACTTT
 CTTCTTTGTACAGTAACCTTTCAACCTTTTCGTTGGCATGTGTGTTAATCCCTGATCCAA
 AAAGAACAATAACACGTATGTTATAACCATCAGCCCGCCAGGGTCAGGGAAAGGACTCAC
 CTGACTTTGGACAGCTGGCCTGGGCTCCCCCTGCTCAAACACAGTGGGGATCAGAGAAAA
 GGGGCTGGAAGGGGGGAATGGCCACATCTCAAGAAGCAAGATATTGTTTGTGGTGGTT
 GTGTGTGGGTGTGTGTTTTTTCTTTTTCTTTTTATTTTTTTGAATGGGGAGGCT
 ATTTATTGTAAGTGGTGTCTGGATATATTCCTTTTGTCTTCATCACTTTCTGAAA
 ATAAACATAAAACTGTTAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire
ACCN: NM_013351
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](#)

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_013351.1](#), [NP_037483.1](#)

RefSeq Size: 2589 bp

RefSeq ORF: 1608 bp

Locus ID: 30009

UniProt ID: [Q9UL17](#)

Cytogenetics: 17q21.32

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 gene is the human ortholog of mouse Tbx21/Tbet gene. Studies in mouse show that Tbx21 protein is a Th1 cell-specific transcription factor that controls the expression of the hallmark Th1 cytokine, interferon-gamma (IFNG). Expression of the human ortholog also correlates with IFNG expression in Th1 and natural killer cells, suggesting a role for this gene in initiating Th1 lineage development from naive Th precursor cells. [provided by RefSeq, Jul 2008]