

## Product datasheet for **RG214605**

### TBX1 (NM\_080646) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TBX1 (NM_080646) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TBX1
Synonyms:	CAFS; CATCH22; CTHM; DGCR; DGS; DORV; TBX1C; TGA; VCF; VCF5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG214605 representing NM_080646 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCACCTCAGCACCGTCACCAGGGACATGGAAGCCTTCACGGCCAGCAGCCTGAGCAGCCTGGGGGCCG  
CGGGGGGCTTCCCGGGCGCCGCTCGCCCGCGCCGACCCGTACGGCCCGCGGAGCCCCCGCCGCGC  
GCCGCGCTACGACCCGTGCGCCCGCCGCCCGCCCGGGCCCGCCGCGCCGCGCCGACGCCTAC  
CCGTTTGCCTGGCCCGCCGGGGCCGCCACCAGCGCCGCGCCGAGCCGAGGGCCCGGGGCCAGCTGCG  
CGCCCGCAGCCAAGGCGCCGGTGAAGAAGAACCGAAGGTGGCCGGTGTGAGCGTGCAGTAGAGATGAA  
GGCGCTGTGGGACGAGTTCAACCAGCTGGGCACCGAGATGATCGTCACCAAGGCCGCGCAGGCGGATGTT  
CCCACCTTCCAAGTGAAGCTCTTCGCGATGGATCCCATGGCCGACTATATGCTGCTCATGGACTTCGTGC  
CGGTGGACGATAAGCGCTACCGGTACGCTTCCACAGCTCCTCCTGGCTGGTGGCGGGGAAGGCCGACCC  
TGCCACGCCAGGCCGCGTGCCTACCCCGGACTCGCTGCCAAGGGCGCGCAGTGGATGAAGCAAATC  
GTGTCTTCGACAAGCTCAAGCTGACCAACAACCTACTGGACGACAACGGCCACATTATTCTGAATTCCA  
TGACAGATACCAGCCCCGCTTCCACGTGGTCTATGTGGACCCACGAAAGATAGCGAGAAATATGCCGA  
GGAGAACTTCAAACCTTTGTGTTTCGAGGAGACACGATTACCCGCGTCACTGCCTACCAGAACCATCGG  
ATCAGCAGCTCAAGATTGCCAGCAATCCCTTCGCGAAAGCTTCCGGGACTGTGACCTGAGGACTGGC  
CCCGGAACACCGGCCCGCGCACTGCCGCTCATGAGCGCTTCGCGCGCTCGCGGAACCCCGTGGCTTC  
CCCGACGACGCCAGCGCACGGAGAAAGTGGACATGTCTGAAAGGACAAGGAAGTGAAGCTGAGACG  
TCTAGGAACACACCAGAGAGAGAAGTGGAGCTTCTGAGGGATGCAGGTGGCTGTGTGAACCTGGGCTCC  
CCTGCCCCGACAGTGCCAACCTTCAATACCCAGGGCTGGTGGCTGGGAGGCCGAGGTGACCGTCT  
TTGT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG214605 representing NM\_080646  
 Red=Cloning site Green=Tags(s)

MHFSTVTRDMEAF TASSLSS LGAAGGFPGAASPGADPYGPREPPPPPPRYDPCAAAAPGAPGPPPPHAY  
 PFAPAAGAATSAAA EPEGPGASCAAAA KAPVKNAKVAGVSVQLEMKALWDEFNQLGTEMI VTKAGRRMF  
 PTFQVKLFGMDPMADYMLLMDFVPVDDKRYRYAFHSSSWLVAGKADPATPGRVHYHPDSPAKGAQWMKQI  
 VSFDKLKL TNNLLDDNGHIILNSMHRYQPRFHVVVYVDP RKDSEKYAEENFKTFVFEETRF TAVTAYQNH  
 RITQLKIASNPF AKGFRDCPEDWPRNHRPGALPLMSAF ARSRNPV ASPTQPSGTEKGGHVLKDKEVKAET  
 SRNTPEREVELLRDAGGCYNLGLPCPAECQPFNTQGLVAGRTAGDRLC

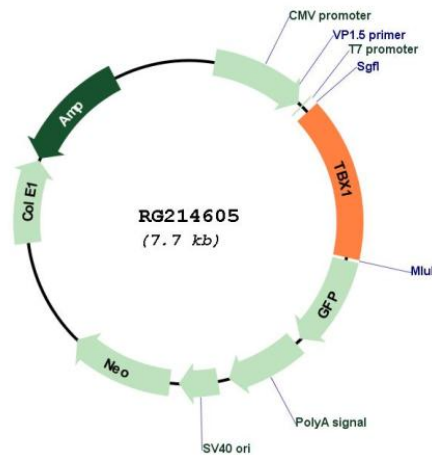
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_080646

<b>ORF Size:</b>	1194 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_080646.1</a> , <a href="#">NP_542377.1</a>
<b>RefSeq Size:</b>	1482 bp
<b>RefSeq ORF:</b>	1197 bp
<b>Locus ID:</b>	6899
<b>UniProt ID:</b>	<a href="#">O43435</a>
<b>Cytogenetics:</b>	22q11.21
<b>Protein Families:</b>	Transcription Factors
<b>Gene Summary:</b>	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 product shares 98% amino acid sequence identity with the mouse ortholog. DiGeorge syndrome (DGS)/velocardiofacial syndrome (VCFS), a common congenital disorder characterized by neural-crest-related developmental defects, has been associated with deletions of chromosome 22q11.2, where this gene has been mapped. Studies using mouse models of DiGeorge syndrome suggest a major role for this gene in the molecular etiology of DGS/VCFS. Several alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2008]