

## Product datasheet for **RG216577**

### **TBX5 (NM\_080718) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** TBX5 (NM\_080718) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** TBX5  
**Synonyms:** HOS  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG216577 representing NM\_080718  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGACGCAGACGAGGGCTTTGGCCTGGCGCACACGCCTCTGGAGCCTGACGCAAAGACCTGCCCT  
GCGATTCGAAACCCGAGAGCGCGCTCGGGGCCCCAGCAAGTCCCGTCGTCGCCGAGGCCGCTTCAC  
CCAGCAGGGCATGGAGGGAATCAAAGTGTTCATGAAAGAGAAGTGGCTAAAATCCACGAAGT  
GGCAGGAAATGATCATAACCAAGGCTGGAAGGCGGATGTTCCAGTTACAAAGTGAAGGTGACGGCC  
TTAATCCAAAACGAAGTACATTCTTCATGGACATTGTACCTGCCGACGATCACAGATACAAATTCGC  
AGATAATAAATGGTCTGTGACGGCAAAGCTGAGCCCGCCATGCCTGGCCGCTGTACGTGACCCAGAC  
TCCCCCGCCACCGGGGCGCATTGGATGAGGCAGCTCGTCTCCTCCAGAACTCAAGCTCACCAACAACC  
ACCTGGACCCATTTGGGCATATTATTCTAAATTCATGCACAAATACCAGCCTAGATTACACATCGTGAA  
AGCGGATGAAAATAATGGATTTGGCTCAAAAAATACAGCGTTCTGCACTCACGTCTTTCCTGAGACTGCG  
TTTATAGCAGTGACTTCTACCAGAACCACAAGATCACGCAATTAAGATTGAGAATAATCCCTTTGCCA  
AAGGATTCGGGGCAGTGATGACATGGAGCTGCACAGAATGTCAAGAATGCAAAGTAAAGAATATCCCGT  
GGTCCCCAGGAGCACCGTGAGGCAAAAAGTGGCCTCAACCACAGTCCTTTCAGCAGCGAGTCTCGAGCT  
CTCTCCACCTCATCCAATTTGGGTCCCAATACCAGTGTGAGAATGGTGTTCGGGCCCTCCAGGACC  
TCCTGCCTCCACCAACCCATACCCACTGCCCCAGGAGCATAGCCAAATTTACCATTGTACCAAGAGGAA  
AGGTGAGTGTGATCACCCCTGGTCAATTTGCTTCTTTCTTACCTTTTCCTTGGGTGGGG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >RG216577 representing NM\_080718  
Red=Cloning site Green=Tags(s)

MADADEGFGLAHTPLEPDAKDLPCDSKPESALGAPSKSPSSPQAAFTQQGMGEEKVFLHERELWLKFHEV  
 GTEMIITKAGRRMFPSYKVKVTGLNPKTKYILLMDIVPADHRYKFADNKWSVTGKAEPAMPGRLYVHPD  
 SPATGAHWMRQLVSFQKLLKLNHLDPFQGHIIILNSMHKYQRLHIVKADENNGFGSKNTAFCTHVPETA  
 FIAVTSYQNHKIQTLKIENPFAGKFRGSDDMELHRMSRMQSKEYPVVPRSTVRQKVASNHSPFSSESRA  
 LSTSSNLGSQYQCENGVSQDILLPPNPYPLPQEHSTIYHCTKRKGECDHPWSICFLSYLFLSLGWG

TRTRPLE - GFP Tag - V

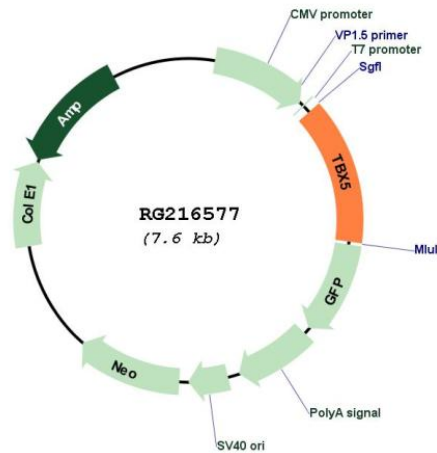
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_080718

**ORF Size:** 1046 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_080718.1</a> , <a href="#">NP_542449.1</a>
<b>RefSeq Size:</b>	1050 bp
<b>RefSeq ORF:</b>	1049 bp
<b>Locus ID:</b>	6910
<b>Cytogenetics:</b>	12q24.21
<b>Domains:</b>	T-box
<b>Protein Families:</b>	Druggable Genome, 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 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]