

## Product datasheet for **RG202477**

### TTF1 (NKX2-1) (NM\_001079668) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TTF1 (NKX2-1) (NM_001079668) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TTF1
Synonyms:	BCH; BHC; NK-2; NKX2.1; NKX2A; NMTC1; T/EBP; TEBP; TITF1; TTF-1; TTF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202477 representing NM_001079668. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTGGTCCGGAGGCAGTGGGAAGGCGCGGGGCTGGGAGGCCGCGGGAGGGAGGAGCAGCCCGGC
AGGCTCAGCCGCCCGGAATCATGTGATGAGTCCAAAGCACACGACTCCGTTCTCAGTGTCTGACATC
TTGAGTCCCTGGAGAAAGCTACAAGAAAGTGGGCATGGAGGGCGCGGCCTCGGGCTCCGCTGGCG
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CACCCGGGCCACAGCCAGGCGCAGGCCAGTCTCCGACCTGGCGCACCCAGCCGCCAGCCCCGCG
GCGCTGCAGGGCCAGGTATCCAGCTGTCCACCTGAACTCCTCGGGCTCGGACTACGGCACCATGTCC
TGCTCCACCTTGCTATACGGTCGGACCTGG
AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



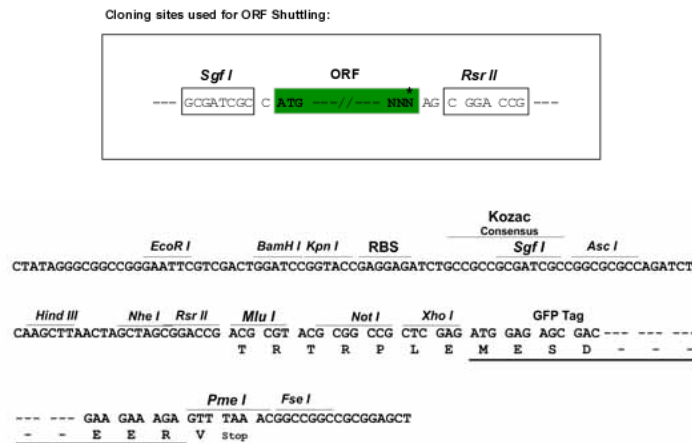
[View online »](#)

**Protein Sequence:** >Peptide sequence encoded by RG202477  
 Blue=ORF Red=Cloning site Green=Tag(s)

MWSGGSGKARGWEAAAGRRSSPGRLSRRRIMSMPKHTTFFSVSDILSPLEESYKKVGMEGGGLGAPLA  
 AYRQGQAAPPTAAMQQHAVGHHGAVTAA YHMTAAGVPQLSHSAVGGYCNGNLGNMSELPPYQDTMRNSA  
 SGPGWYGANPDRFPAISRFGMPASGMNMSGMGLGSLGDVSKNMAPLPSAPRRKRRLVFSQAQVYELE  
 RRFKQQKYL SAPEREHLASMIHLTPTQVKIWFQNHRYKMKRQAKDKAAQQQLQQDSGGGGGGGTGCPQ  
 QQQAQQQSPRRVAVPVLVKDGKPCQAGAPAGAAASLQGHAAQQAQQAQAAAAAISVSGGGAGLGA  
 HPGHQPGSAGQSPDLAHHAASPAALQGQVSSLSHLNSSGSDYGTMSCSTLLYGRTW  
 SGPTRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLL  
 SHVMGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGF  
 PEDSVIFTDKIIRS NATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFSAIHPSILQNGGP  
 MFAFRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_001079668

**ORF Size:** 1203 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\\_001079668.3](#)

**RefSeq Size:** 2183 bp

**RefSeq ORF:** 1206 bp

**Locus ID:** 7080

**UniProt ID:** [P43699](#)

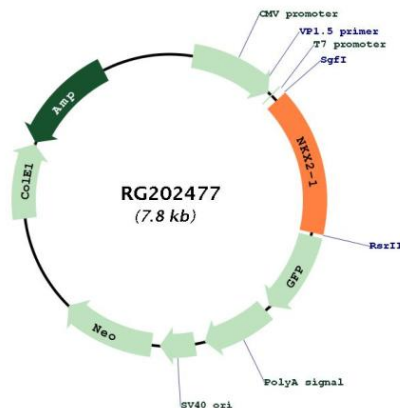
**Cytogenetics:** 14q13.3

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

**MW:** 41.7 kDa

**Gene Summary:** This gene encodes a protein initially identified as a thyroid-specific transcription factor. The encoded protein binds to the thyroglobulin promoter and regulates the expression of thyroid-specific genes but has also been shown to regulate the expression of genes involved in morphogenesis. Mutations and deletions in this gene are associated with benign hereditary chorea, choreoathetosis, congenital hypothyroidism, and neonatal respiratory distress, and may be associated with thyroid cancer. Multiple transcript variants encoding different isoforms have been found for this gene. This gene shares the symbol/alias 'TTF1' with another gene, transcription termination factor 1, which plays a role in ribosomal gene transcription. [provided by RefSeq, Feb 2014]

### Product images:



Circular map for RG202477