

## Product datasheet for RC226653

### TSH Receptor (TSHR) (NM\_001142626) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TSH Receptor (TSHR) (NM_001142626) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TSH Receptor
Synonyms:	CHNG1; hTSHR-I; LGR3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC226653 representing NM_001142626 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGCCGGCGGACTTGCTGCAGCTGGTCTGCTGCTCGACCTGCCAGGGACCTGGCGGAATGGGGT  
GTTCTGCTCCACCCTGCGAGTGCCATCAGGAGGAGGACTTCAGAGTCACCTGCAAGGATATCAACGCAT  
CCCCAGCTTACCGCCAGTACGCAGACTCTGAAGCTTATTGAGACTCACCTGAGAACTATCCAAGTCAT  
GCATTTCTAATCTGCCAATATTTCCAGAATCTACGTATCTATAGATGTGACTCTGCAGCAGCTGGAAT  
CACACTCTTCTACAATTTGAGTAAAGTGACTCACATAGAAATTCGGAATACCAGGAACTAACTTACAT  
AGACCCTGATGCCCTCAAAGAGCTCCCCCTCCTAAAGTTCCTTGGCATTTC AACACTGGACTTAAATG  
TTCCCTGACCTGACCAAAGTTTATTCCACTGATATATTCTTTATACTTGAATACAGACAACCCCTTACA  
TGACGTCAATCCCTGTGAATGCTTTTCAGGGACTATGCAATGAAACCTTGACACTGAAGCTGTACAACA  
TGGCTTACTTCAGTCCAAGGATATGCTTTCAATGGGACAAAGCTGGATGCTGTTTACCTAAACAAGAA  
AAATACCTGACAGTTATTGACAAAGATGCATTTGGAGGAGTATACAGTGGACCAAGCTTGCTGGTAGAAA  
ATGTTGCTGTCTCGGGTAAAGGCTTCTGCAAGTCCCTCTTTCTGGCTGTATAGGCTACCTCTTGGAA  
AAAGTCTTGTCTTTGAGACTCAGAAGCCCCACGCTCCAGTATGCCATCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC226653 representing NM\_001142626  
Red=Cloning site Green=Tags(s)

MRPADLLQLVLLLDLPRDLGGMGCSSPPCEHQEEDFRVTCKDIQRIPSLPSTQTLKLIETHLRTIPSH  
 AFSNLPNISRIYVSIDVTLQQLSHSFYNLSKVTHIEIRNTRNLTYIDPDALKELPLLKFLGIFNTGLKM  
 FPDLTkVYSTDIFFILEITDNPYMTSIPVNAFQGLCNETLTLKLYNNGFTSVQGYAFNGTKLDAVYLNKN  
 KYLTVIDKDAFGGVYSGPSLLVENVAVSGKGFCKSLFSLWLYRPLGRKLSLFTETQKAPRSSMPS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8048\\_f03.zip](https://cdn.origene.com/chromatograms/mk8048_f03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001142626

**ORF Size:** 822 bp

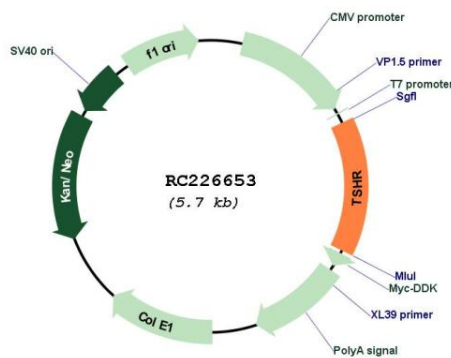
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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](#)

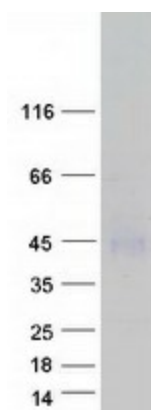
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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>	<u><a href="#">NM_001142626.3</a></u>
<b>RefSeq ORF:</b>	825 bp
<b>Locus ID:</b>	7253
<b>UniProt ID:</b>	<u><a href="#">P16473</a></u>
<b>Cytogenetics:</b>	14q31.1
<b>Protein Families:</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways:</b>	Autoimmune thyroid disease, Neuroactive ligand-receptor interaction
<b>MW:</b>	30.8 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a membrane protein and a major controller of thyroid cell metabolism. The encoded protein is a receptor for thyrothopin and thyrostimulin, and its activity is mediated by adenylate cyclase. Defects in this gene are a cause of several types of hyperthyroidism. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2008]

**Product images:**



Circular map for RC226653



Coomassie blue staining of purified TSHR protein (Cat# [TP326653]). The protein was produced from HEK293T cells transfected with TSHR cDNA clone (Cat# RC226653) using MegaTran 2.0 (Cat# [TT210002]).