

## Product datasheet for **RC220499**

### TSH Receptor (TSHR) (NM\_000369) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TSH Receptor (TSHR) (NM_000369) 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)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC220499 representing NM\_000369  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGAGGCCGGCGACTTGCTGCAGCTGGTGTCTGCTGCTCGACCTGCCAGGGACCTGGGCGGAATGGGGT  
GTTGCTCTCCACCCTGCGAGTGCCATCAGGAGGAGGACTTCAGAGTCACCTGCAAGGATATTCAACGCAT  
CCCCAGCTTACCGCCAGTACGCAGACTCTGAAGCTTATTGAGACTCACCTGAGAAGTATTCCAAGTCAT  
GCATTTTCTAATCTGCCAATATTTCCAGAATCTACGTATCTATAGATGTGACTCTGCAGCAGCTGGAAT  
CACACTCCTTCTACAATTTGAGTAAAGTGACTCACATAGAAATTCGGAATACCAGGAACTTAACTTACAT  
AGACCCTGATGCCCTCAAAGAGCTCCCCCTCTAAAGTTCCTTGGCATTTCACACTGGACTTAAATG  
TTCCCTGACCTGACCAAAGTTTATTCCACTGATATATTCTTTATACTTGAATACAGACAACCCTTACA  
TGACGTCAATCCCTGTGAATGCTTTTCAGGGACTATGCAATGAAACCTTGACACTGAAGCTGTACAACA  
TGGCTTTACTTCAGTCCAAGGATATGCTTTCAATGGGACAAAGCTGGATGCTGTTTACCTAAACAAGAAT  
AAATACCTGACAGTTATTGACAAAGATGCAATTTGGAGGAGTATACAGTGGACCAAGCTTGCCTGGAGTGT  
CTCAAACCAAGTGTCACTGCCCTCCATCCAAAGGCCTGGAGCACCTGAAGGAACTGATAGCAAGAAACAC  
CTGGACTCTTAAGAACTTCCACTTTCCTTGAGTTTCTTACCTCACACGGGCTGACCTTTCTTACCCA  
AGCCACTGCTGTGCTTTTAAAGATCAGAAGAAAATCAGAGGAACTCTTGAGTCTTGATGTGTAATGAGA  
GCAGTATGCAGAGCTTGCGCCAGAGAAAATCTGTGAATGCCTTGAATAGCCCCCTCCACCAGGAATATGA  
AGAGAATCTGGGTGACAGCATTGTTGGGTACAAGGAAAAGTCCAAGTTCAGGATACTATAACAACGCT  
CATTATTACGTCTTCTTTGAAGAACAAGAGGATGAGATCATTGGTTTTGGCCAGGAGCTCAAAAACCCCT  
AGGAAGAGACTCTACAAGCTTTTGACAGCCATTATGACTACCCATATGTGGGGACAGTGAAGACATGGT  
GTGTACCCCAAGTCCGATGAGTTCAACCCGTGTGAAGACATAATGGGCTACAAGTTCCTGAGAATTGTG  
GTGTGGTTCGTTAGTCTGCTGGCTCCTGGGCAATGTCTTTGTCTGCTTATTCTCCTACCAGCCACT  
ACAAACTGAACGTCCCCGCTTCTCATGTGCAACCTGGCCTTTGCGGATTTCTGCATGGGGATGTACCT  
GCTCCTCATCGCCTCTGTAGACCTCTACACTCACTCTGAGTACTACAACCATGCCATCGACTGGCAGACA  
GGCCCTGGGTGCAACACGGCTGGTTTCTCACTGTCTTTGCAAGCGAGTTATCGGTGTATACGCTGACGG  
TCATCACCTGGAGCGCTGGTATGCCATCACCTTCGCCATGCGCCTGGACCGGAAGATCCGCCTCAGGCA  
CGCATGTGCCATCATGGTTGGGGCTGGGTTTGTCTCCTTCTCGCCCTGCTTCCTTTGGTGGGAATA  
AGTAGCTATGCCAAAGTCAGTATCTGCCTGCCATGGACACCGAGACCCCTCTTGTCTGGCATATATTG  
TTTTTGTCTGACGCTCAACATAGTTGCCCTTCGTATCGTCTGCTGCTGTTATGTGAAGATCTACATCAC  
AGTCCGAAATCCGAGTACAACCCAGGGGACAAAGATACCAAAATTGCCAAGAGGATGGCTGTGTTGATC  
TTCACCGACTTCATATGCATGGCCCAATCTCATTCTATGCTCTGTGAGCAATTCTGAACAAGCCTCTCA  
TCACTGTTAGCAACTCCAAAATCTTGTGGTACTCTTCTATCCACTTAACTCCTGTGCCAATCCATTCT  
CTATGCTATTTTACCAAGGCCTTCCAGAGGGATGTGTTTATCCTACTCAGCAAGTTTGGCATCTGTAAA  
CGCCAGGCTCAGGCATACCGGGGCGAGAGGTTCTCCTCAAAGAACAGCACTGATATTAGGTTCAAAGG  
TTACCCACGACATGAGGCAGGGTCTCCACAACATGGAAGATGTCTATGAAGTATTGAAAACCTCCATCT  
AACCCAAAGAAGCAAGGCCAAATCTCAGAAGAGTATATGCAAACGGTTTTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC220499 representing NM\_000369  
 Red=Cloning site Green=Tags(s)

MRPADLLQLVLLLDLPRDLGGMGCSSPPCEHQEEDFRVTCKDIQRIPSLPSTQTLKLIETHLRTIPSH  
 AFSNLPNISRIYVSIDVTLQQLSHSFYNLSKVTHIEIRNTRNLTYIDPDALKELPLKFLGIFNTGLKM  
 FPDLTkVYSTDIFFILEITDNPYMTSIPVNAFQGLCNETLTLKLYNNGFTSVQGYAFNGTKLDAVYLNKN  
 KYLTVIDKDAFGGVYSGPSLLDVSQTSVTALPSKGLEHLKELIARNTWTLKPLSLSFLHLTRADLSYP  
 SHCCAFKNQKKIRGILESLMCNESSMQSLRQRKSVNALNSPLHQEYEENLGDIVGYKEKSKFQDTHNNA  
 HYYVFFEEQEDEIIGFGQELKNPQEETLQAFDSHYDYTCGDSEDMVCTPKSDEFNCPEDIMGYKFLRIV  
 VWFVSLALLGNVFLVLLILLTSHYKLVNPRFLMCNLAFAFCMGMYLLLIASVDLYTHSEYNAIDWQT  
 GPGCNTAGFFTFASELSVYTLTVITLERWYAITFAMRLDRKIRLRHACAIMVGGWVCCFLALLPLVGI  
 SSYAKVSIICLPMDETPLALAYIVFVLTNIVAFVIVCCCVYKIYITVRNPQYNPGDKDTIAKRMVLI  
 FTDFICMAPISFYALSAILNKPLITVSNKILLVLFYPLNSCANPFLYAIFTKAFQRDVFIKSKFGICK  
 RQAQAYRGQRVPPKNSTDIQVQKVTHDMRQGLHNMEDVYELIENSHLTPKKQGQISEEYMQTVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6170\\_g12.zip](https://cdn.origene.com/chromatograms/mk6170_g12.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\_000369

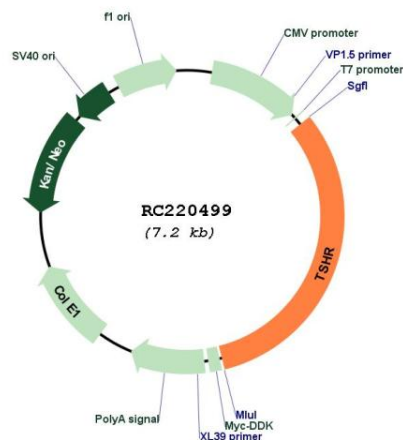
**ORF Size:** 2292 bp

**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](#)

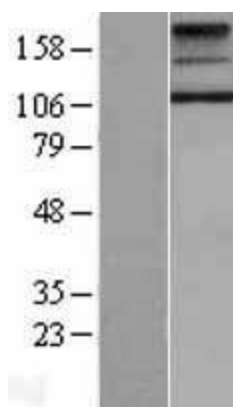
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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_000369.5</a>
<b>RefSeq Size:</b>	4410 bp
<b>RefSeq ORF:</b>	2295 bp
<b>Locus ID:</b>	7253
<b>UniProt ID:</b>	<a href="#">P16473</a>
<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>	86.83 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 RC220499



Western blot validation of overexpression lysate (Cat# [LY400133]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220499 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).