

Product datasheet for **RG216914**

TSH beta (TSHB) (NM_000549) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TSH beta (TSHB) (NM_000549) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: TSHB
Synonyms: TSH-B; TSH-BETA
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG216914 representing NM_000549
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACTGCTCTTTCTGATGCCATGCTTTTGGCCTTGCATGTGGCAAGCGATGCTTTTTGTATTC
 CAACTGAGTATACAATGCACATCGAAAGGAGAGAGTGTGCTTATTGCCTAACCATCAACACCACCATCTG
 TGCTGGATATTGTATGACACGGGATATCAATGGCAAAGTGTCTCCCAAATATGCTCTGTCCCAGGAT
 GTTTGCACATATAGAGACTTCATCTACAGGACTGTAGAAATACCAGGATGCCACTCCATGTTGCTCCCT
 ATTTTTCTATCCTGTTGCTTTAAGCTGTAAGTGTGGCAAGTGAATACTGACTATAGTACTGCATACA
 TGAAGCCATCAAGACAACTACTGTACCAAACCTCAGAAGCTTATCTGGTAGGATTTCTGTCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG216914 representing NM_000549
 Red=Cloning site Green=Tags(s)

MTALFLMSMLFGLACGQAMSFCIPTEYTMHIERRECAAYCLTINTTICAGYCMTRDINGKLFPLPKYALSQD
 VCTYRDFIYRTVEIPGCPLHVAPYFSYPVALSCKCGKCNTDYSDCIHEAIKTNCTKPKQSYLVGFSV

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

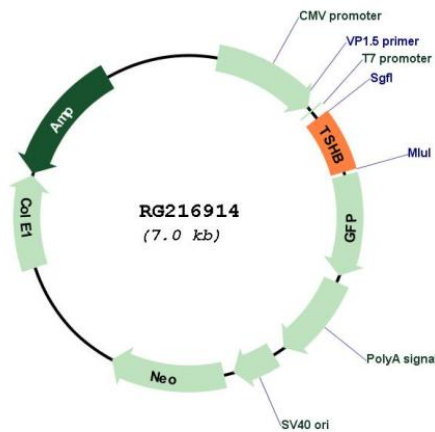


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Cloning Scheme:



Plasmid Map:



ACCN: NM_000549

ORF Size: 414 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:	<ol style="list-style-type: none">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_000549.2 , NP_000540.1
RefSeq Size:	578 bp
RefSeq ORF:	417 bp
Locus ID:	7252
UniProt ID:	P01222
Cytogenetics:	1p13.2
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Autoimmune thyroid disease, Neuroactive ligand-receptor interaction
Gene Summary:	The four human glycoprotein hormones chorionic gonadotropin (CG), luteinizing hormone (LH), follicle stimulating hormone (FSH), and thyroid stimulating hormone (TSH) are dimers consisting of alpha and beta subunits that are associated noncovalently. The alpha subunits of these hormones are identical, however, their beta chains are unique and confer biological specificity. Thyroid stimulating hormone functions in the control of thyroid structure and metabolism. The protein encoded by this gene is the beta subunit of thyroid stimulating hormone. Mutations in this gene are associated with congenital central and secondary hypothyroidism and Hashimoto's thyroiditis. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, May 2013]