

## **Product datasheet for SC300095**

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## TSH beta (TSHB) (NM\_000549) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: TSH beta (TSHB) (NM 000549) Human Untagged Clone

Tag: Tag Free
Symbol: TSH beta

Synonyms: TSH-B; TSH-BETA

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM\_000549 edited

ATGACTGCTCTTTTCTGATGTCCATGCTTTTTGGCCTTGCATGTGGGCAAGCGATGTCT
TTTTGTATTCCAACTGAGTATACAATGCACATCGAAAGGAGAGAGTGTGCTTATTGCCTA
ACCATCAACACCACCATCTGTGCTGGATATTGTATGACACGGGATATCAATGGCAAACTG
TTTCTTCCCAAATATGCTCTGTCCCAGGATGTTTGCACATATAGAGACTTCATCTACAGG
ACTGTAGAAATACCAGGATGCCCACTCCATGTTGCTCCCTATTTTTCCTATCCTGTTGCT
TTAAGCTGTAAGTGTGGCAAGTGCAATACTGACTATAGTGACTGCATACATGAAGCCATC
AAGACAAACTACTGTACCAAACCTCAGAAGTCTTATCTGGTAGGATTTTCTGTCTAA

**Restriction Sites:** Please inquire ACCN: NM\_000549

**Insert Size:** 500 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** The ORF of this clone has been fully sequenced and found to be a perfect match to

NM 000549.2.

**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: <u>NM 000549.2</u>, <u>NP 000540.1</u>

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1, also known as native TSH-beta). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments and data in published reports (PMID 3243440).