

## Product datasheet for **SC108521**

### Tryptophan Hydroxylase (TPH1) (NM\_004179) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tryptophan Hydroxylase (TPH1) (NM_004179) Human Untagged Clone
Tag:	Tag Free
Symbol:	Tryptophan Hydroxylase
Synonyms:	TPRH; TRPH
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108521 sequence for NM_004179 edited (data generated by NextGen Sequencing)

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ATGATTGAAGACAATAAGGAGAACAAGACCATTCCCTTAGAAAGGGGAAGAGCAAGTCTC
ATTTTTTCCTTAAAGAATGAAGTTGGAGGACTTATAAAAGCCCTGAAAATCTTTTCAGGAG
AAGCATGTGAATCTGTTACATATCGAGTCCCGAAAATCAAAAAGAAGAACTCAGAAATTT
GAGATTTTTGTTGACTGTGACATCAACAGAGAACAATTGAATGATATTTTTCATCTGCTG
AAGTCTCATACCAATGTTCTCTGTGAATCTACCAGATAATTTTACTTTGAAGGAAGAT
GGTATGGAAGTCTTCTTGGTTTCCAAAGAAGATTTCTGACCTGGACCATTGTGCCAAC
AGAGTTCTGATGTATGGATCTGAACTAGATGCAGACCATCCTGGCTTCAAAGACAATGTC
TACCGTAAACGTCGAAAGTATTTTCCGGACTTGGCTATGAACTATAAACATGGAGACCCC
ATTCCAAAGGTTGAATTCAGTGAAGAGGAGATTAAAGACCTGGGGAAACCGTATTCCAAGAG
CTCAACAAACTCTACCCAACCATGCTTGCAGAGAGTATCTCAAAAACCTACCTTTGCTT
TCTAAATATTGTGGATATCGGGAGGATAATATCCACAATTGGAAGATGTCTCCAACCTT
TAAAAAGAGCGTACAGGTTTTTCCATCCGTCCTGTGGCTGGTTACTTATCACCAAGAGAT
TTCTTATCAGGTTTAGCCTTTTCGAGTTTTTCACTGCACTCAATATGTGAGACACAGTTCA
GATCCCTTCTATACCCAGAGCCAGATACCTGCCATGAACTCTTAGGTGATGTCCCGCTT
TTGGCTGAACCTAGTTTTGCCCAATCTCCAAGAAATTTGGCTTGGCTTCTTTGGCGCT
TCAGAGGAGGCTGTTCAAAAAGTGGCAACGTGCTACTTTTTCACTGTGGAGTTTGGTCTA
TGTAACAAGATGGACAGCTAAGAGTCTTTGGTGTGGCTTACTTTCTTCTATCAGTGAA
CTCAAACATGCACCTTTCTGGACATGCCAAAGTAAAGCCCTTTGATCCCAAGATTACCTGC
AAACAGGAATGTCTTATCACAACTTTTCAAGATGTCTACTTTGTATCTGAAAGTTTTGAA
GATGCAAAGGAGAAGATGAGAGAATTTACCAAAAACAATTAAGCGTCCATTTGGAGTGAAG
TATAATCCATATACACGGAGTATTCAGATCCTGAAAGACACCAAGAGCATAAACCAGTGCC
ATGAATGAGCTGCAGCATGATCTCGATGTTGTCAGTGATGCCCTTGCTAAGGTCAGCAGG
AAGCCGAGTATCTAA
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Clone variation with respect to NM\_004179.2



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_004179 unedited CCTAATTTGTAATACGACTCACTTATAGGGCGGCCGGAATTCGCACGAGGCTCCCGGA GTTTTAGAGAATTACTCCAAATTCATCATGATTGAAGACAATAAGGAGAACAAAGACCAT TCCTTAGAAAGGGGAAGAGCAAGTCTCATTTCCTTAAAGAATGAAGTTGGAGGACTT ATAAAAGCCCTGAAAATCTTTCAGGAGAAGCATGTGAATCTGTTACATATCGAGTCCCGA AAATCAAAAAGAAGAACTCAGAATTTGAGATTTTGTGACTGTGACATCAACAGAGAA CAATTGAATGATATTTTCATCTGCTGAAGTCTCATACCAATGTTCTCTCTGTGAATCTA CCAGATAATTTTACTTTGAAGGAAGATGGTATGGAACTGTTCTTGGTTTCCAAAGAAG ATTTCTGACCTGGACCATTGTGCCAACAGAGTTCTGATGTATGGATCTGAACTAGATGCA GACCATCTGGCTTCAAAGACAATGTCTACCGTAAACGTCGAAAGTATTTTTCGGACTTG GCTATGAACTATAAATCATGGAGACCCCATTCCAAAGGTTGAATTCCTGAAGAGGAGATT AAGACCTGNGGAACCGTATTCGAAGAGCTCAACAACTCTACCCAACCCATGCTTGCGA GAGTATCTCAAAAACCTTACCTTTGCTTTCTAAATATTGTGGATATCGGGAGGATAATATC CCACAATGNAAGATGTCTCAACTCTTAAAAAGAGCGTACAGGGTTTTCCATCCGTCCT GTGGCTGGTTACTTATACCAAGAGATTCTTATCAGGTTTACCTTCGAGTTTTACTGC ACTCATATGTGGAAACAGTTCAGACCCTTCTATACCCAGAGCCAGATACTGCCATGAACT CTTAGTCATGTCCCGCTTTTGTGACCTAGTTGCCAATCTCCAGAAATGCCTGCTTTT TTGCGCTTANAGAG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_004179
<b>Insert Size:</b>	3400 bp
<b>OTI Disclaimer:</b>	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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a>
<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_004179.1</a> , <a href="#">NP_004170.1</a>

RefSeq Size:	1335 bp
RefSeq ORF:	1335 bp
Locus ID:	7166
UniProt ID:	<a href="#">P17752</a>
Cytogenetics:	11p15.1
Domains:	biopterin_H, ACT
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Tryptophan metabolism
Gene Summary:	<p>This gene encodes a member of the aromatic amino acid hydroxylase family. The encoded protein catalyzes the first and rate limiting step in the biosynthesis of serotonin, an important hormone and neurotransmitter. Mutations in this gene have been associated with an elevated risk for a variety of diseases and disorders, including schizophrenia, somatic anxiety, anger-related traits, bipolar disorder, suicidal behavior, addictions, and others.[provided by RefSeq, Apr 2009]</p>