

Product datasheet for **MR207141**

Tph1 (NM_009414) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tph1 (NM_009414) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tph1
Synonyms:	Tph
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR207141 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATTGAAGACAACAAGGAGAACAAGAGAACAAGACCATTCTCCGAAAGAGGGAGAGTGACTCTCA
 TCTTCTCCTTGGAGAATGAAGTCGGAGGACTCATAAAAGTGCTGAAAATCTTCCAGGAGAATCATGTGAG
 CCTGTTACACATCGAGTCCCGAAATCAAAGCAAAGAAATTCAGAATTTGAGATATTTGTTGACTGCGAC
 ATCAGCCGAGAACAGTTGAATGACATCTTCCCCTGCTGAAGTCGCACGCCACCGTCTCTCGGTGGACT
 CGCCCGATCAGCTCACTGCAAGGAAGACGTTATGGAGACTGTCCCTTGGTTTCAAAGAAGATTTCTGA
 CCTGGACTTCTGCGCCAACAGAGTGCTGTTGTATGGATCCGAACTTGACGCCGACCACCTGGCTTCAA
 GACAATGTCTATCGTAGAAGACGAAAGTATTTGCAGAGTTGGCTATGAACTACAAACATGGGGACCCCA
 TTCCCAAGATTGAATCACGGAAGAAGAGATTAAGACCTGGGGGACCATCTTCCGAGAGCTAAACAACT
 CTACCCGACCCAGCCTGCAGGGAGTACCTCAGAAACCTCCCTTGTCTCAAAACTGTGGCTATCGG
 GAAGACAACATCCCGCAACTGGAGGATGTCTCAAATTTTTAAAAGAACGCACTGGGTTTTCCATCCGTC
 CTGTGGCTGGTTACCTCTCACCGAGAGATTTTCTGTCCGGGTTAGCCTTTCGAGTCTTTCAGTCACTCA
 GTATGTGAGACACAGTTCAGATCCCCTCTACACTCCAGAGCCAGACACCTGCCATGAACTCCTAGGCCAC
 GTTCTCTCTTGGCTGAACCCAGTTTGTCAATTCTCCAAGAAATTTGGCTGGCTTCCCTTGGAGCTT
 CAGAGGAGACAGTTCAAAAAGTGGCAACGTTGCTACTTTTTCACTGTGGAGTTTGGCTGTGCAACAAGA
 TGGACAGCTGAGAGTCTTTGGGGCCGGCTTGTCTTCCATCAGTGAACCAACATGCACTTTCTGGA
 CATGCCAAAGTCAAGCCCTTTGATCCCAAGATTGCCTGTAACAGGAATGTCTCAGCAGCTTCCAGG
 ATGTCTACTTTGTATCTGAGAGCTTTGAAGATGCAAAGGAGAAGATGAGAGAATTTGCCAAGACCGTGAA
 GCGCCCGTTTGGACTGAAGTACAACCCGTACACACAGAGTGTTCAAGTTCTCAGAGACACCAAGAGCATA
 ACTAGTGCCATGAATGAGTTGCGGTATGACCTGTATGTCATCAGTATGCCCTCGCTAGGGTACCAGGT
 GGCCAGTGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207141 protein sequence
 Red=Cloning site Green=Tags(s)

MIEDNKENKENDHSSERGRVTLIFSLENEVGGLIKVLKIFQENHVSLHIESRKSQRNSEFEIFVDCD
 ISREQLNDIFPLLKSHATVLSVDSPDQLTAKEDVMETVPWFPKISDLDFCANRVLLYSELADADHPGFK
 DNVYRRRRKYFAELAMNYKHGDPKPKIEFTEEEIKTWGTFRELNKLYPTHACREYLRLPLLKCYCYR
 EDNIPQLEDVSNFLKERTGFSIRPVAGYLSRDFLSGLAFRVFHCTQYVRHSSDPLYTPEPDTCHELLGH
 VPLLAEPSFAQFSQIEGLASLGASEETVQKLATCYFFTVFVGLCKQDQGLRVFGAGLLSSI SELKHALSG
 HAKVKPFDPKIACKQECLITSFQDVYFVSEFEDAKEKREFAKTVKRPFGKLYNPYTQSVQVLRDTSI
 TSAMNELRYDLVDLARDVTRWPSV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_009414

ORF Size: 1344 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:**
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_009414.3](#)

RefSeq Size: 4581 bp

RefSeq ORF: 1344 bp

Locus ID: 21990

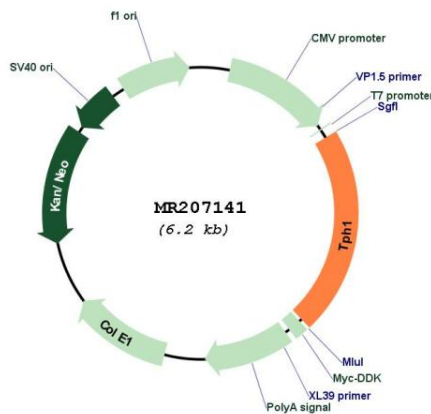
UniProt ID: [P17532](#)

Cytogenetics: 7 30.43 cM

MW: 51.3 kDa

Gene Summary: This gene encodes a member of the bipterin-dependent aromatic amino acid hydroxylase family. The encoded protein is one of two tryptophan hydroxylase enzymes that catalyze the first and rate limiting step in the biosynthesis of the hormone and neurotransmitter, serotonin. This gene is expressed in peripheral organs, while tryptophan hydroxylase 2 is expressed in neurons. The encoded protein is involved in the development of hypoxia-induced elevations in pulmonary pressures and pulmonary vascular remodeling, and has also been implicated as a regulator of immune tolerance. Disruption of this gene is associated with cardiac dysfunction. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2013]

Product images:



Circular map for MR207141