

## Product datasheet for **MR230427**

### **Tyrp1 (NM\_001282015) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Tyrp1 (NM_001282015) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tyrp1
Synonyms:	b; brown; isa; Oca3; TRP-1; TRP1; Tyrp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR230427 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAATCTTACAACGTCCTCCCCCTAGCCTATATCTCCCTTTTCTGATGCTGTTTTATCAGTTTGGG  
 CTCAGTTTCCACGAGAGTGTGCCAATATTGAGGCTCTGAGACGTGGGGTGTGTTGCCAGACCTGCTCCC  
 TTCTCTGGACCGGGACTGACCCTTGTGGCTCATCATCAGGAAGAGGCAGGTGTGTGGCTGTGATTGCA  
 GACTCCCAGCCCCACAGCCGCCATTATCCCACGATGGTAAAGATGACCGAGAAGCCTGGCCTCTGAGGT  
 TCTTTAATAGAACATGTCAGTGAATGATAATTTCTCAGGACACAACCTGTGGACTTGCCGCTCTGGGTG  
 GAGAGGAGCTGCATGCAACCAGAAAATTCTCACAGTCAGGAGAAATCTTCTAGACTTAAGTCCAGAAGAA  
 AAGAGCCACTTTGTCAGGGCCTTGATATGGCGAAGCGCACAACTCACCTCAATTTGTCATTGCCACAA  
 GGAGGTTAGAAGACATACTGGGACCAGATGGCAACACACCACAATTTGAGAACATTTCCGTTTAACTA  
 CTTTGTGGACACACTATTATTCAGTCAAAAAACCTTCTCGGACAGGACAGGAAAGCTTTGGGGAT  
 GTGGATTTCTCTACGAAGGACCCGCTTTCTCATGACAGGTACCATCTGCTGCAGCTGGAGAGAG  
 ACATGCAGGAGATGCTGCAGGAGCCTTCTTCTCCCTTCTTACTGGAATTTGCAACTGGGAAAAACGT  
 CTGCGATGTCTGCACTGACTTGATGGGATCCAGAAGCAACTTCGATTCTACTCTTATAAGCCCCAAC  
 TCTGTCTTTTCTCAATGGAGAGTGGTCTGTGAATCCTTGGAAAGAGTACGATACCTGGGAACACTTTGTA  
 ACAGCACTGAGGGTGGACCAATCAGGAGAAACCCAGCTGGAAATGTAGGGAGACCAGCAGTGCAGCGTCT  
 TCCTGAGCCACAGGATGTCACTCAGTGCCTGGAGTCCGTGTATTTGACACACCTCTTTTATTCCAAT  
 TCTACAGACAGTTTTTCGAAATACAGTGAAGGTTACAGTGTCTCCACGGGAAAATATGACCTGCTGTT  
 GAAGCCTTCAACAACCTGGCCACCTCTTCTGAATGGAACGGGAGGACAAACCAATTTGTCTCCCAATGA  
 TCCTATTTTTGTCTCCTGCACACTTTCACTGATGCGGTCTTTGACGAATGGCTAAGGAGGTATAACGCC  
 GATATTTCTACCTTCCCGTTGGAAAACGCACCTATTGGACATAACAGGCAATACAACATGGTGCCATTCT  
 GGCTCCAGTTACCAACACAGAAATGTTTGTACTGCTCCAGACAATCTGGGATATGCTTATGAAGTTCA  
 ATGGCCAGGTGAGGAGTTACTGTATCTGAAATCATTACCATTGCTGTAGTGGCTGCGTTGTACTTGT  
 GCTGCCATTTTCGGGGTTGCTTCTGTCTGATCCGTTCTAGAAGCACCAAGAATGAAGCCAACAGCCTC  
 TCCTCACTGATCACTATCAACGCTATGCTGAGGACTATGAGGAGCTCCCGAATCTAACCACTCCATGGT  
 C

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR230427 protein sequence  
 Red=Cloning site Green=Tags(s)

MKSYNVLPLAYISLFLMLFYQVWAQFPRECANIEALRRGVCCPDLLPSSGPGTDPGSSSGRRCVAVIA  
 DSRPHSRHYPHDGKDDREAWPLRFFNRTCQCNDNFSGHNCGTCRPGWRGAACNQKILTVRRNLLDLSP  
 KSHFVRALDMAKRTTHPQFVIATRRELDILGPDGNTQPENISVYNYFVWTHYYSVKKFTLGTGQESFGD  
 VDFSHEGPAFLTWHRYHLLQLERDMQEMLQEPSFSLPYWNFATGKNVCDVCTDDLMSRSNFDSTLISPN  
 SVFSQWRVVCESLEEYDTLGTLCNSTEGGPIRRNPAGNVGRPAVQRLPEPQDVTQCLEVRVFDTPPFYSN  
 STDSFRNTVEGYSAPTGYDPAVRSLNLAHLFLNGTGGQTHLSPNDPIFVLLHTFTDAVFDEWLRRYNA  
 DISTFPLENAPIGHNQRQNMVFPVPPVTNEMFVTAPDNLGYAYEVQWPGQEFTVSEIITIAVVAALLLV  
 AAIFGVASCLIRSRSTKNEANQPLLTDHYQRYAEDYEELPNPNHSMV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001282015

**ORF Size:** 1611 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\\_001282015.1](#), [NP\\_001268944.1](#)

**RefSeq Size:** 2734 bp

**RefSeq ORF:** 1614 bp

**Locus ID:** 22178

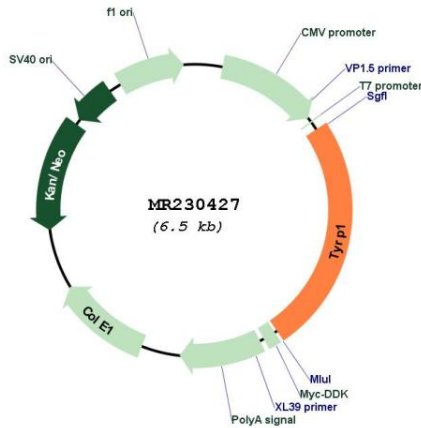
**UniProt ID:** [P07147](#)

**Cytogenetics:** 4 37.89 cM

**MW:** 60.8 kDa

**Gene Summary:** Plays a role in melanin biosynthesis (PubMed:2245916). Catalyzes the oxidation of 5,6-dihydroxyindole-2-carboxylic acid (DHICA) into indole-5,6-quinone-2-carboxylic acid (PubMed:7813420). May regulate or influence the type of melanin synthesized (PubMed:7813420, PubMed:2245916). Also to a lower extent, capable of hydroxylating tyrosine and producing melanin (PubMed:1537333).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR230427