

## Product datasheet for **RC204486**

### TRP2 (DCT) (NM\_001922) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRP2 (DCT) (NM_001922) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRP2
Synonyms:	TRP-2; TYRP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC204486 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAGCCCCCTTTGGTGGGGTTTCTGCTCAGTTGCTTGGGCTGCAAATCCTGCCAGGAGCCAGGGTC  
 AGTCCCCCGAGTCTGCATGACGGTGGACAGCCTAGTGAACAAGGAGTGCTGCCACGCCTGGGTGCAGA  
 GTCGGCAATGTCTGTGGCTCTCAGCAAGGCCGGGGCAGTGCACAGAGGTGCGAGCCGACACAAGGCC  
 TGGAGTGGTCCCTACATCCTACGAAACCAGGATGACCGTGAGCTGTGGCCAAGAAAATTCTCCACCGGA  
 CCTGCAAGTGCACAGGAACTTTGCCGGCTATAATTGTGGAGACTGCAAGTTTGGCTGGACCGGTCCCAA  
 CTGCGAGCGGAAGAAACCACCAGTATTGCGCAGAACATCCATTCCTTGTAGTCTCAGGAAAGAGAGCAG  
 TTCTTGGGCGCCTTAGATCTCGGAAGAAGAGAGTACCCCCGACTACGTGATCACCACACAACACTGGC  
 TGGGCTGCTTGGGCCAATGGAACCCAGCCGAGTTTGGCAACTGCAGTGTATGATTTTTTTGTGTG  
 GCTCCATTATTCTGTAGAGATACATTATTAGGACCAGGACGCCCTACAGGGCCATAGATTTCTCA  
 CATCAAGGACCTGCATTTGTTACCTGGCACCGGTACCATTGTTGTGTCTGGAAAGAGATCTCCAGCGAC  
 TCATTGGCAATGAGTCTTTTGTCTTGCCTACTGGAACCTTGCCACTGGGAGGAACGAGTGTGATGTGTG  
 TACAGACCAGCTGTTGGGGCAGCGAGACCAGACGATCCGACTCTGATTAGTCGGAACCTCAAGATTCTCC  
 AGCTGGGAAACTGTCTGTGATAGCTTGGATGACTACAACCACCTGGTCACCTTGTGCAATGGAACCTATG  
 AAGTTTGTCTGAGAAGAAATCAAATGGGAAGAAACAGCATGAAATTGCCAACCTAAAAGACATACGAGA  
 TTGCCTGTCTCCTCAGAAGTTTGACAATCCTCCCTTCTCCAGAAGTCTACCTTCAGTTTCAGGAATGCT  
 TTGGAAGGTTTGATAAAGCAGATGGGACTCTGGATTCTCAAGTGTGAGCCTTCATAATTTGGTTTCATT  
 CCTTCTGAACGGGACAAACGCTTTGCCACATTCAGCCGCAATGATCCCATTTTTGTGGTTCTTCATT  
 CTTTACTGATGCCATCTTTGATGAGTGGATGAAAAGATTTAATCCTCCTGCAGATGCCTGGCCTCAGGAG  
 CTGGCCCCATTGGTCACAATCGGATGTACAACATGGTTCCTTTCTCCCTCCAGTACTAATGAAGAAC  
 TCTTTTTAACCTCAGACCAACTTGGCTACAGCTATGCCATCGATCTGCCAGTTTCAGTTGAAGAACTCC  
 AGGTTGGCCCAACTCTTAGTAGTCATGGGAACACTGGTGGCTTTGGTTGGTCTTTTTGTGCTGTTG  
 GCTTTTCTCAATATAGAAGACTTCGAAAAGGATATACCCCTAATGGAGACACATTTAAGCAGCAAGA  
 GATACACAGAAGAAGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC204486 protein sequence  
 Red=Cloning site Green=Tags(s)

MSPLWWGFLLSCLGCKILPGAQQFPRVCMVDSL VNKECCPRLGAESANVCGSQQGRGQCTEVRADTRP  
 WSGPYILRNQDDRELWPRKFFHRTCKCTGNFAGYNCGDCKFGWTGPNCERKKPPVIRQNIHSLSPQEREQ  
 FLGALDLAKKRVHPDYVITTHWLGLLGPNGTQPQFANCSVYDFVWLHYYSVRDTHLLGPRPYRAIDFS  
 HQGPAFVTWHRYHLLCLERDLQRLIGNESFALPYWNFATGRNECDVCTDQLFGAARPDDPTLISRNSRFS  
 SWETVCDLDDYNHLVTL CNGTYEGLLRNQMRNSMKLPTLKDIRDCLSLQKFDNPPFFQNSTFSFRNA  
 LEGFDKADGTLDSQVMSLHNLVHSFLNGTNALPHSAANDP IFVVLHSFTDAIFDEWMKRFNPPADAWPQE  
 LAPIGHNRMYNMVPPFPVVTNEELFLTSQLGYSYAIDL PVSVEETPGWPTLLVVMGTLVALVGLFVLL  
 AFLQYRRLRKGYTPLMETHLSSKRYTEEA

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6013\\_e08.zip](https://cdn.origene.com/chromatograms/mk6013_e08.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001922

**ORF Size:** 1557 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\\_001922.5](#)

**RefSeq Size:** 2304 bp

**RefSeq ORF:** 1560 bp

**Locus ID:** 1638

**UniProt ID:** [P40126](#)

**Cytogenetics:** 13q32.1

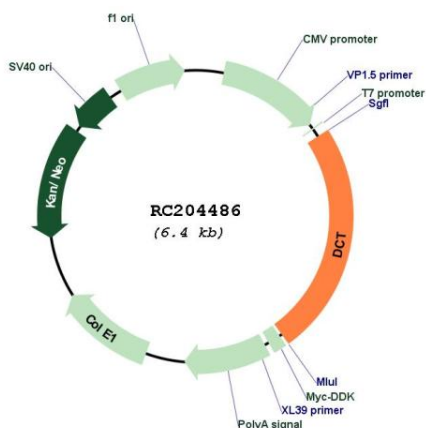
**Protein Families:** Transmembrane

**Protein Pathways:** Melanogenesis, Metabolic pathways, Tyrosine metabolism

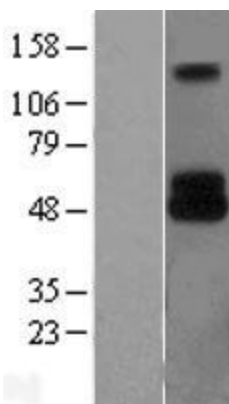
**MW:** 59.1 kDa

**Gene Summary:** Catalyzes the conversion of L-dopachrome into 5,6-dihydroxyindole-2-carboxylic acid (DHICA) (PubMed:8306979). Involved in regulating eumelanin and pheomelanin levels. [UniProtKB/Swiss-Prot Function]

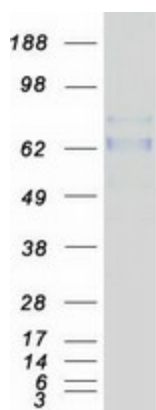
**Product images:**



Circular map for RC204486



Western blot validation of overexpression lysate (Cat# [LY419657]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204486 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DCT protein (Cat# [TP304486]). The protein was produced from HEK293T cells transfected with DCT cDNA clone (Cat# RC204486) using MegaTran 2.0 (Cat# [TT210002]).