

## Product datasheet for **RC225945**

### TRP2 (DCT) (NM\_001129889) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRP2 (DCT) (NM_001129889) 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:**

>RC225945 representing NM\_001129889  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAGCCCCCTTTGGTGGGGTTTCTGCTCAGTTGCTTGGGCTGCAAATCCTGCCAGGAGCCAGGGTC  
 AGTCCCCCGAGTCTGCATGACGGTGGACAGCCTAGTGAACAAGGAGTGCTGCCACGCCTGGGTGCAGA  
 GTCGGCCAATGTCTGTGGCTCTCAGCAAGGCCGGGGCAGTGCACAGAGGTGCGAGCCGACACAAGGCC  
 TGGAGTGGTCCCTACATCCTACGAAACCAGGATGACCGTGAGCTGTGGCCAAGAAAATTCTCCACCGGA  
 CCTGCAAGTGCACAGGAACTTTGCCGGCTATAATTGTGGAGACTGCAAGTTTGGCTGGACCGGTCCCAA  
 CTGCGAGCGGAAGAAACCACCAGTGATTCGGCAGAACATCCATTCCTTGGTCTCAGGAAAGAGAGCAG  
 TTCTTGGGCGCCTTAGATCTCGGAAGAAGAGAGTACCCCCGACTACGTGATCACCACACAACACTGGC  
 TGGGCTGCTTGGGCCAATGGAACCCAGCCGAGTTTGCCAACGCAGTGTATGATTTTTTTGTGTG  
 GCTCCATTATTCTGTAGAGATACATTATTAGGACCAGGACGCCCTACAGGGCCATAGATTTCTCA  
 CATCAAGGACCTGCATTTGTTACCTGGCACCGGTACCATTGTTGTGTCTGGAAAGAGATCTCCAGCGAC  
 TCATTGGCAATGAGTCTTTTGTCTTGCCTACTGGAACCTTGCCACTGGGAGGAACGAGTGTGATGTGTG  
 TACAGACCAGCTGTTGGGGCAGCGAGACCAGACGATCCGACTCTGATTAGTCGGAACCTCAAGATTCTCC  
 AGCTGGGAAACTGTCTGTGATAGCTTGGATGACTACAACCACCTGGTCACCTTGTGCAATGGAACCTATG  
 AAGTTTGTCTGAGAAGAAATCAAATGGGAAGAAACAGCATGAAATTGCCAACCTAAAAGACATACGAGA  
 TTGCCTGTCTCCAGAAGTTTGACAATCCTCCCTTCTCCAGAAGTCTACCTTCAGTTTCAGGAATGCT  
 TTGGAAGGTTTGATAAAGCAGATGGGACTCTGGATTCTCAAGTATGAGCCTTCATAATTTGGTTTCATT  
 CCTTCTGAACGGGACAAACGCTTTGCCACATTCAGCCGCAATGATCCCATTTTTGTGGTGTATTTCTAA  
 TCGTTTTGCTTTACAATGCTACAACAAACATCCTTGAACATGTAAGAAAAGAGAAAGCGACCAAGGAACCT  
 CCTCCCTGCATGTGCTGGTTCTTATTCTTTACTGATGCCATCTTTGATGAGTGGATGAAAAGATTTA  
 ATCCTCTGCAGATGCCTGGCCTCAGGAGCTGGCCCTATTGGTCACAATCGGATGTACAACATGGTTCC  
 TTTCTCCCTCCAGTGACTAATGAAGAAGTCTTTTAACTCAGACCAACTTGGCTACAGCTATGCCATC  
 GATCTGCCAGTTTCAGTTGAAGAACTCCAGTTGGCCACAACCTCTTAGTAGTCATGGGAACACTGG  
 TGGCTTTGGTGGTCTTTTTGTGCTGTTGGCTTTTCTCAATATAGAAGACTTCGAAAAGGATATACACC  
 CCTAATGGAGACACATTTAAGCAGCAAGAGATACACAGAAGAAGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC225945 representing NM\_001129889  
 Red=Cloning site Green=Tags(s)

MSPLWWGFLLSCLGCKILPGAQQFPRVCMVDSL VNKECCPRLGAESANVCGSQQGRGQCTEVRADTRP  
 WSGPYILRNQDDRELWPRKFFHRTCKCTGNFAGYNCGDCKFGWTGPNCKERKPPVIRQNIHSLSPQEREQ  
 FLGALDLAKKRVHPDYVITQHWLGLLGPNGTQPQFANCSVYDFVWLHYYSVRDILLGPRPYRAIDFS  
 HQGPAFVTWHRYHLLCLERDLQRLIGNESFALPYWNFATGRNECDVTDQLFGAARPDDPTLISRNSRFS  
 SWETVCDLDDYNHLVTL CNGTYEGLLRNQMRNSMKLPTLKDIRDCLSLQKFDNPPFFQNSTFSFRNA  
 LEGFDKADGTLDSQVMSLHNLVHSFLNGTNALPHSAANDPIFVVISNRLLYNATTNILEHVRKEKATKEL  
 PSLHVLVLHSFTDAIFDEWMKRFNPPADAWPQELAPIGHNRMYNMVPFFPPVTNEELFLTSDQLGYSYAI  
 DLPVSVEETPGWPTLLVVMGTLVALVGLFVLLAFLQYRRLRKGYTPLMETHLSSKRYTEEA

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8066\\_h06.zip](https://cdn.origene.com/chromatograms/mk8066_h06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001129889

**ORF Size:** 1656 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\\_001129889.2](#), [NP\\_001123361.1](#)

**RefSeq ORF:** 1659 bp

**Locus ID:** 1638

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

**Cytogenetics:** 13q32.1

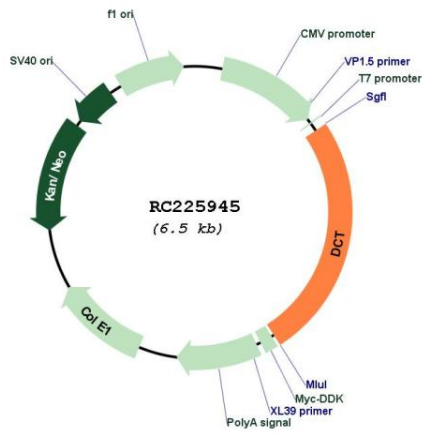
**Protein Families:** Transmembrane

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

**MW:** 62.7 kDa

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

**Product images:**



Circular map for RC225945