

## Product datasheet for **MR208292**

### **Dct (NM\_010024) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dct (NM_010024) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dct
Synonyms:	DT; slaty; slt; TRP-2; TRP2; Tyrp-2; Tyrp2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR208292 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGCCTTGTTGGGATGGGGCTTCTGCTGGGTTGTCTGGGCTGCGGAATTCGCTCAGAGCTCGGGCTC  
 AGTTTCCCGAGTCTGCATGACCTTGGATGGCGTGCTGAACAAGGAATGCTGCCCGCTCTGGTCCCGA  
 GGCAACCAACATCTGTGATTTCTAGAGGGCAGGGGCGAGTGCAGAGGTGCAAAACAGACACCAGACCC  
 TGGAGTGGCCCTTATATCCTTCGAAACCAGGATGACCGTGAGCAATGGCCGAGAAAATTCTCAACCGGA  
 CATGCAAAATGCACAGGAACTTTGCTGGTTATAATTGGGAGGCTGCAAGTTCGGCTGGACCGGCCCGA  
 CTGTAATCGGAAGAAGCCGGCCATCCTAAGACGGAATATCCATCCCTGACTGCCAGGAGAGGGAGCAG  
 TTCTTGGGCGCTTAGACCTGGCCAAGAAGAGTATCCATCCAGACTACGTGATCACCACGCAACTGGC  
 TGGGGCTGCTCGGACCAACGGGACCCAGCCCCAGATCGCCAATGCAGCGTGTATGACTTTTTTGTGTG  
 GCTCCATTATTCTGTTCGAGACACATTATTAGGTCCAGGACGCCCTATAAGGCCATTGATTTCTCT  
 CACCAAGGGCCTGCCTTTGTACGTGGCACAGGTACCATCTGTTGTGGCTGGAAAGAGAACTCCAGAGAC  
 TCACTGGCAATGAGTCCTTTGCGTTGCCCTACTGGAACTTTGCAACCGGGAAGAAGCAGTGTGACGTGTG  
 CACAGACGAGCTGCTTGGAGCAGCAAGACAAGTACCCAACGCTGATTAGTCGGAACCTCGAGATTCTCT  
 ACCTGGGAGATTGTGTGCGACAGCTTGGATGACTACAACCGCGGGTCACACTGTGTAATGGAACCTATG  
 AAGTTTGTCTGAGAAGAAACAAAGTAGGCAGAAATAATGAGAACTGCCAACCTTAAAAATGTGCAAGA  
 TTGCCTGTCTCTCAGAAGTTTACAGCCCTCCCTTCTCCAGAAGTCTACCTTCAGCTTCAGGAATGCA  
 CTGGAAGGGTTTGATAAAGCAGACGGAACACTGGACTCTCAAGTCATGAACCTTCATAAATTGGCTCACT  
 CTTTCTGAATGGGACCAATGCCTTGGCACACTCAGCAGCAACGACCCCTGTGTTTGGTCCCTCCACTC  
 TTTTACAGACGCCATCTTTGATGAGTGGCTGAAGAGAAACAACCTTCCACAGATGCCTGGCCTCAGGAA  
 CTGGCACCCATTGGTCACAACCGAATGTATAACATGGTCCCTTCTTCCACCGGTGACTAATGAGGAGC  
 TCTTCTAACCAGCAGAGCAACTGGCTACAATTACGCCGTTGATCTGTCAGAGGAAGAAGCTCCAGTTTG  
 GTCCACAACCTCTCAGTGGTCAATGGAATCCTGGGAGCTTTCGCTTGTCTTGGGGTTGCTGGCTTTT  
 CTTCAATACAGAAGGCTTCGAAAGGCTATGCGCCCTAATGGAGACAGGTCTCAGCAGCAAGAGATACA  
 CGGAGGAAGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208292 protein sequence  
 Red=Cloning site Green=Tags(s)

MGLVWGLLLLGCLGCGILLRARAQFPRVCMTLDGVLNKECCPPLGPEATNICGFLEGRGQCAEVQTDTRP  
 WSGPYILRNQDDREQWPRKF FNRTCKCTGNFAGYNCGGCKFGWTGPDCNRKPAILRRNIHSLTAQEREQ  
 FLGALDLAKKSIHPDYVITTHWLGLLGPNGTQPQIANCSVYDFVWLHYYSVRDILLGPGRPYKAIDFS  
 HQGPAFVTHRYHLLWLERELQRLTGNESFALPYWNFATGKNECDVCTDELLGAARQDDPTLISRNSRFS  
 TWEIVCDSLDDYNRRVTLNNGTYEGLLRNKNVGRNNEKPLTKNVQDCLSLQKFDSPFFQNSTFSFRNA  
 LEGFDKADGTLDSQVMNLHNLHLSFLNGTNALPHSAANDPVFVVLHSFTDAIFDEWLKRNNPSTDAWPQE  
 LAPIGHNRMVMVPPFPVVTNEELFLTAEQLYGNYAVDLSEEEAPVWSTL SVVIGILGAFVLLGLLAF  
 LQYRRLRKGAPLMETGLSSKRYTEEA

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_010024

ORF Size: 1554 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\\_010024.3](#), [NP\\_034154.2](#)

RefSeq Size: 2279 bp

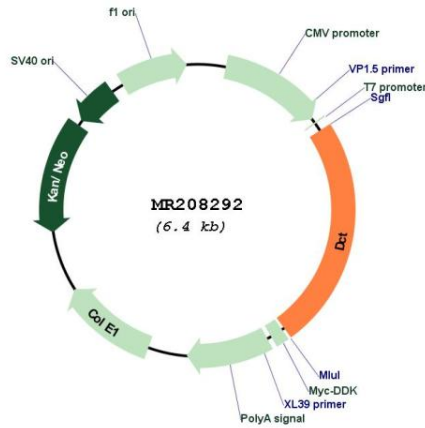
RefSeq ORF: 1554 bp

Locus ID: 13190

UniProt ID: [P29812](#)

**Cytogenetics:** 14 61.6 cM  
**MW:** 58.5 kDa  
**Gene Summary:** Catalyzes the conversion of L-dopachrome into 5,6-dihydroxyindole-2-carboxylic acid (DHICA) (PubMed:1537333). Involved in regulating eumelanin and phaeomelanin levels. [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR208292