

Product datasheet for **RG217231**

DCTD (NM_001921) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: DCTD (NM_001921) Human Tagged ORF Clone
 Tag: TurboGFP
 Symbol: DCTD
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-AC-GFP (PS100010)
 E. coli Selection: Ampicillin (100 ug/mL)
 ORF Nucleotide Sequence: >RG217231 representing NM_001921
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTGGCGGGGGCCAGCCGTGCGGACCAACATGAGTGAAGTTTCTGCAAGAAACGGGACGACTATT
 TGGAAATGGCCAGAGTATTTATGGCTGTGGCCTTCTTATCAGCACAGAGAAGCAAAGATCCAAATCCCA
 GGTCGGCGCCTGCATCGTGAATTCAGAAAACAAGATTGTCGGGATTGGGTACAATGGGATGCCAAATGGG
 TGCAGTGATGACGTGTTGCCTTGGAGAAGGACAGCAGAGAATAAGCTGGACACCAATACCCGTACGTGT
 GCCATGCGGAGCTGAATGCCATCATGAACAAAATTTCGACCGATGTGAAAGGCTGTAGTATGTATGTTGC
 CTTGTTCCCTTGAATGAATGCGCTAAGCTCATCATCCAGGCAGGTATAAAGAAGTGATTTTCATGTCT
 GATAAATACCATGATAGTGACGAGGCAACTGCTGCGAGGCTCCTGTTTAATATGGCCGGGTGACATTCC
 GGAAATTCATACCGAAGTGCAGCAAGATTGTCATTGACTTTGATTCAATTAACAGCAGACCGAGTCAAAA
 GCTTCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG217231 representing NM_001921
 Red=Cloning site Green=Tags(s)

MVGGGQPCGPNMSEVSKKRDDYLEWPEYFMAVAFLSAQRSKDPNSQVGACIVNSENKIVGIGYNGMPNG
 CSDDVLPWRRTAENKLDTKYPYVCHAELNAIMNKNSTDVKGCSMYVALFPCNECAKLI IQAGIKEIVFMS
 DKYHDSDEATAARLLFNMAGVTRFKFIPKCSKIVIDFDSINSRPSQKLQ

TRTRPLE - GFP Tag - V

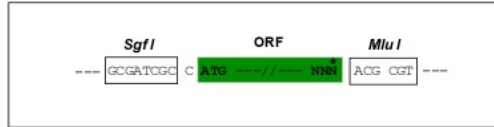
Restriction Sites: SgfI-MluI



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Cloning Scheme:

Cloning sites used for ORF Shutting:



```

                                Kozac
                                Consensus
                                Sgf I   Asc I
EcoR I   BamH I Kpn I   RBS
CTATAGGGCGGCGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

Hind III   Nhe I   Rsr II   Mlu I   Not I   Xho I   GFP Tag
CAAGCTTAAGTACTAGCTAGCGGACCG   ACG CGT   ACG CGG   CCG CTC   GAG ATG   GAG AGC   GAC --- --- ---
                                     T   R   T   R   P   L   E   M   E   S   D   -   -   -

                                Pme I   Fse I
--- --- GAA GAA AGA   GTT TAA   ACGGCCGGCCGCGGAGCT
- - - E E R   V   Stop
    
```

ACCN: NM_001921

ORF Size: 567 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_001921.2](#), [NP_001912.2](#)
RefSeq Size: 2019 bp

RefSeq ORF: 537 bp

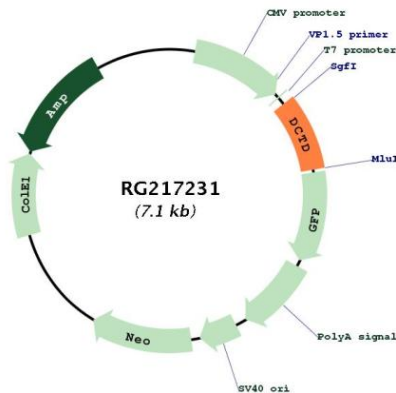
Locus ID: 1635

UniProt ID: [P32321](#)

Cytogenetics: 4q35.1
Domains: dCMP_cyt_deam
Protein Pathways: Metabolic pathways, Pyrimidine metabolism

Gene Summary: The protein encoded by this gene catalyzes the deamination of dCMP to dUMP, the nucleotide substrate for thymidylate synthase. The encoded protein is allosterically activated by dCTP and inhibited by dTTP, and is found as a homohexamer. This protein uses zinc as a cofactor for its activity. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG217231