

Product datasheet for MR202251

Dtd1 (NM_025314) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dtd1 (NM_025314) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Dtd1
Synonyms: 0610006H08Rik; DTD; DUE-B; Hars2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR202251 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGGCCGTGGTGCAGCGCTCACTCGGGCTAGCGTCACAGTTGGAGGAGAGCAGATAAGCGCCATCG
 GACGGGGCATCTGTCTTGGTGGTATTTCCATGGAAGACTCACAGAAGGAAGTGAACACATGGTTCCG
 AAAGATTTAAATCTGCGTGTGTTTGGAGCAGAGTGGGAAGCACTGGTCCAAGAGCGTATGGATAAG
 GAGTACGAGGTGCTGTGTGCAGCCAGTTCACCCTCCAGTGCCTCAAGGGGAACAAGCCGACTTCC
 ACCTGGCCATGCCACAGAGCAGGCAGAGACTTCTACAACAGCTTCTGGAGCAGCTTCGCAAGAGCTA
 CAGACCAGAGCTTATCAGAGATGGCAAGTTTGGTGCCTACATGCAGGTGCACATTCAGAACGATGGCCT
 GTGACTATAGAGCTGGAGTCCCCGTCTCTGGAGCTGCTAGCTCTGACCCAAAGCAGCTGTCAAAGCTGG
 AGAAACAGCAGCAGAGAAAAGAAAAGACCAGAGCCAAAGGCCCTTCTGAGTCAAGCAAAGAACGGAATGC
 ACCCCGAAAGAAGACCGCAGCGCCAGCAGCGGGCAGAGGGTGACGTGTCTTCTGAGCGGGAGCCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR202251 protein sequence
 Red=Cloning site Green=Tags(s)

MKAVVQRVTRASVTVGGEQISAIGRGICVLLGISMEDSQKELEHMVRKILNLRVFEDESGKHWSKSVMDK
 EYEVLCVSQFTLQCVLKGNKPDFHLAMPTEQAESFYNSFLEQLRKSYPPELIRDGKFGAYMQVHIQNDGP
 VTIELESPAPGAASSDPKQLSKLEKQQQRKEKTRAKGPSESSKERNAPRKEDRSASSGAEGDVSSEREP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_025314

ORF Size: 630 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_025314.3](#), [NP_079590.1](#)

RefSeq Size: 1283 bp

RefSeq ORF: 630 bp

Locus ID: 66044

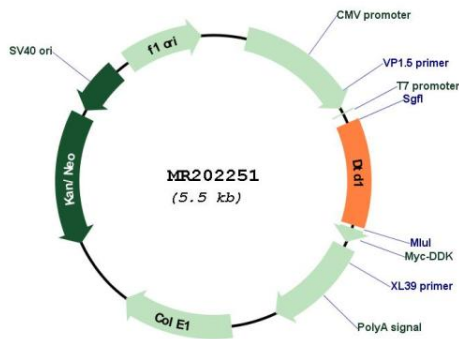
UniProt ID: [Q9DD18](#)

Cytogenetics: 2 G1

MW: 23.4 kDa

Gene Summary: An aminoacyl-tRNA editing enzyme that deacylates mischarged D-aminoacyl-tRNAs. Also deacylates mischarged glycyl-tRNA(Ala), protecting cells against glycine mischarging by AlaRS. Acts via tRNA-based rather than protein-based catalysis; rejects L-amino acids rather than detecting D-amino acids in the active site. By recycling D-aminoacyl-tRNA to D-amino acids and free tRNA molecules, this enzyme counteracts the toxicity associated with the formation of D-aminoacyl-tRNA entities in vivo and helps enforce protein L-homochirality. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202251