

## Product datasheet for **RG210010**

### CD3D (NM\_000732) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CD3D (NM\_000732) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** CD3D  
**Synonyms:** CD3-DELTA; IMD19; T3D  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG210010 representing NM\_000732  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAACATAGCAGTTTCTCTCTGGCCTGGTACTGGCTACCCTTCTCTCGCAAGTGAGCCCTTCAAGA  
 TACCTATAGAGAACTTGAGGACAGAGTGTGGTGAATTGCAATACCAGCATCACATGGGTAGAGGGAAAC  
 GGTGGAACTGCTCTCAGACATTACAAGACTGGACCTGGGAAAACGCATCCTGGACCCACGAGGAATA  
 TATAGGTGAATGGACAGATATATAACAAGGACAAAGAATCTACCGTGCAAGTTCATTATCGAATGTGCC  
 AGAGCTGTGTGGAGCTGGATCCAGCCACCGTGGCTGGCATCATTGTCACTGATGTCATTGCCACTCTGCT  
 CCTTGCTTTGGGAGTCTTCTGCTTTGCTGGACATGAGACTGGAAGGCTGTCTGGGCTGCCGACACAAA  
 GCTCTGTTGAGGAATGACCAGGTCTATAGCCCTCCGAGATCGAGATGATGCTCAGTACAGCCACCTTG  
 GAGGAACTGGGCTCGGAACAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG210010 representing NM\_000732  
 Red=Cloning site Green=Tags(s)

MEHSTFLSGLVLAATLLSQVSPFKIPIEELEDVFNVCNTSITWVEGTVGTLSDITRLDLGKRILDPRGI  
 YRCNGTDIYKDKESTVQVHYRMCQSCVELDPATVAGIIVTDVIATLLALGVFCFAGHETGRLSGAADTQ  
 ALLRNDQVYQPLRDRDDAQYSHLGGNWARNK

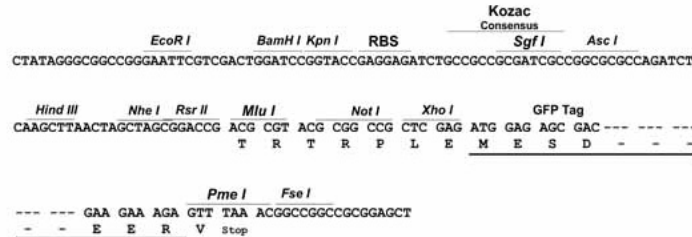
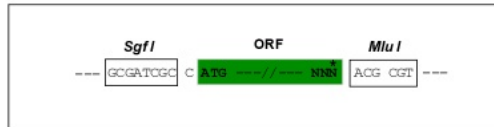
**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**ACCN:** NM\_000732

**ORF Size:** 513 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\\_000732.6](#)

**RefSeq Size:** 1585 bp

**RefSeq ORF:** 516 bp

**Locus ID:** 915

**UniProt ID:** [P04234](#)

**Cytogenetics:** 11q23.3

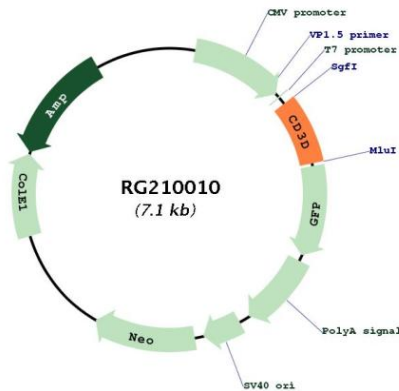
**Domains:** ITAM

**Protein Families:** Druggable Genome

**Protein Pathways:** Hematopoietic cell lineage, Primary immunodeficiency, T cell receptor signaling pathway

**Gene Summary:** The protein encoded by this gene is part of the T-cell receptor/CD3 complex (TCR/CD3 complex) and is involved in T-cell development and signal transduction. The encoded membrane protein represents the delta subunit of the CD3 complex, and along with four other CD3 subunits, binds either TCR alpha/beta or TCR gamma/delta to form the TCR/CD3 complex on the surface of T-cells. Defects in this gene are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-positive (SCIDBNK). Two transcript variants encoding different isoforms have been found for this gene. Other variants may also exist, but the full-length nature of their transcripts has yet to be defined. [provided by RefSeq, Feb 2009]

**Product images:**



Circular map for RG210010