

Product datasheet for **RC220512**

CD3G (NM_000073) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CD3G (NM_000073) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CD3G
Synonyms: CD3-GAMMA; IMD17; T3G
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC220512 representing NM_000073
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAACAGGGGAAGGGCCTGGCTGTCCTCATCCTGGCTATCATTCTTCAAGGTAAGGACTTTGGCCAGT
CAATCAAAGGAAACCACTTGGTTAAGGTGTATGACTATCAAGAAGATGGTTCGGTACTTCTGACTTGTGA
TGCAGAAGCCAAAAATATCACATGGTTTAAAGATGGGAAGATGATCGGCTCCTAACTGAAGATAAAAA
AAATGGAATCTGGGAAGTAATGCCAAGGACCTCGAGGGATGTATCAGTGTAAAGGATCACAGAACAAGT
CAAACCACTCCAAGTGTATTACAGAATGTGTCAGAACTGCATTGAACTAAATGCAGCCACCATATCTGG
CTTTCTCTTTGCTGAAATCGTCAGCATTTTCGTCCTTGCTGTTGGGGTCTACTTCATTGCTGGACAGGAT
GGAGTTGCCAGTCGAGAGCTTCAGACAAGCAGACTCTGTTGCCCAATGACCAGCTCTACCAGCCCTCA
AGGATCGAGAAGATGACCAGTACAGCCACCTTCAAGGAAACCAAGTTGAGGAGGAAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220512 representing NM_000073
Red=Cloning site Green=Tags(s)

MEQGKGLAVLILAIILLQGTLAQSIKGNHLVKVYDYQEDGSVLLTCDAEAKNITWFKDGKMI GFLTEDKK
KWNLGSNAKDPRGMYQCKGSQNKSKPLQVYYRMCQNCIELNAATISGFLFAEIVSIFVLAVGVYFIAGQD
GVRQSRASDKQTL L PNDQLYQPLKDREDDQYSHLQGNQLRRN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

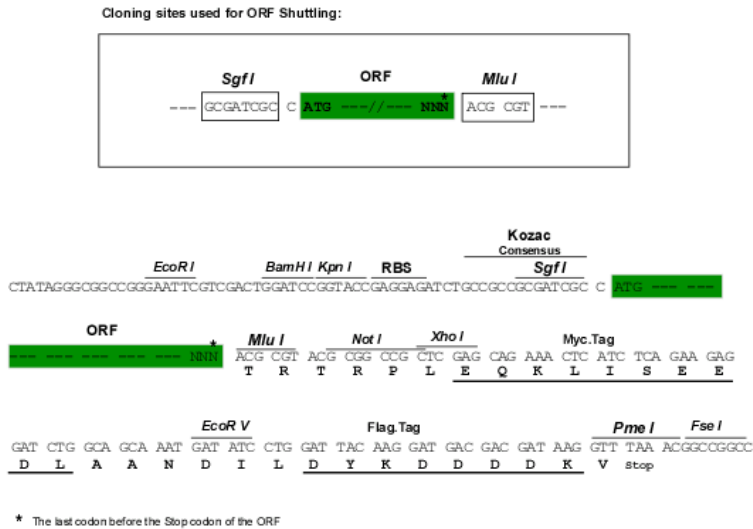
Chromatograms: https://cdn.origene.com/chromatograms/mg2560_b07.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000073

ORF Size: 546 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000073.3](#)

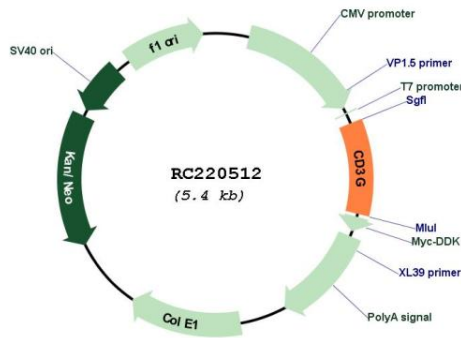
RefSeq Size: 822 bp

RefSeq ORF: 549 bp

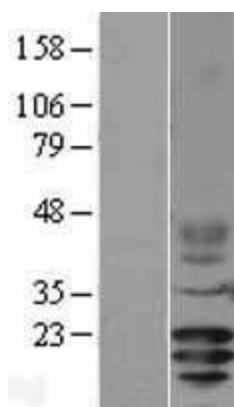
Locus ID: 917
UniProt ID: [P09693](#)
Cytogenetics: 11q23.3
Domains: ITAM, IGc2
Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Hematopoietic cell lineage, T cell receptor signaling pathway
MW: 20.47 kDa

Gene Summary: The protein encoded by this gene is the CD3-gamma polypeptide, which together with CD3-epsilon, -delta and -zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T-cell receptor-CD3 complex. This complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. Defects in this gene are associated with T cell immunodeficiency. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC220512



Western blot validation of overexpression lysate (Cat# [LY400019]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220512 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).