

Product datasheet for MC207244

Cd3d (NM_013487) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cd3d (NM 013487) Mouse Untagged Clone

Tag: Tag Free Symbol: Cd3d

Synonyms: T3d

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC207244 representing NM_013487

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGAACACGGGGATTCTGGCTAGTCTGATACTGATTGCTGTTCTCCCCCAAGGGAGCCCCTTCAAGA
TACAAGTGACCGAATATGAGGACAAAGTATTTGTGACCTGCAATACCAGCGTCATGCATCTAGATGGAAC
GGTGGAAGGATGGTTTGCAAAGAATAAAACACTCAACTTGGGCAAAGGCGTTCTGGACCCACGAGGGATA
TATCTGTGTAATGGGACAGAGCAGCTGGCAAAGGTGGTGTCTTCTGTGCAAGTCCATTACCGAATGTGCC
AGAACTGTGTGAGCTAGACTCGGGCACCATGGCTGGTGTCATCTTCATTGACCTCATCGCAACTCTGCT
CCTGGCTTTGGGCGTCTACTGCTTTGCAGGACATGAGACCGGAAGGCCTTCTGGGGCTGCTGAGGTTCAA
GCACTGCTGAAGAATGAGCAGCTGTATCAGCCTCTTCGAGATCCTGAAGATACCCAGTACAGCCGTCTTG

GAGGGAACTGGCCCCGGAACAAGAAATCTTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_013487

Insert Size: 522 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



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The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube Components:

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.

NM 013487.3, NP 038515.3 RefSeq:

RefSeq Size: 1330 bp RefSeq ORF: 522 bp 12500 Locus ID: **UniProt ID:** P04235 Cytogenetics: 9 24.84 cM

Gene Summary: Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role

in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways. In addition of this role of signal transduction in

T-cell activation, CD3D plays an essential role in thymocyte differentiation. Indeed,

participates in correct intracellular TCR-CD3 complex assembly and surface expression. In absence of a functional TCR-CD3 complex, thymocytes are unable to differentiate properly (PubMed:10935641). Interacts with CD4 and CD8 and thus serves to establish a functional link between the TCR and coreceptors CD4 and CD8, which is needed for activation and positive

selection of CD4 or CD8 T-cells.[UniProtKB/Swiss-Prot Function]