

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
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC207244 representing NM_013487
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAACACAGCGGGATTCTGGCTAGTCTGATACTGATTGCTGTTCTCCCCAAGGGAGCCCTTCAAGA
 TACAAGTGACCGAATATGAGGACAAAGTATTTGTGACCTGCAATACCAGCGTCATGCATCTAGATGGAAC
 GGTGGAAGGATGGTTTGCAAAGAATAAAACACTCAACTTGGGCAAAGGCGTTCTGGACCCACGAGGGATA
 TATCTGTGTAATGGGACAGAGCAGCTGGCAAAGGTGGTGTCTTCTGTGCAAGTCCATTACCGAATGTGCC
 AGAACTGTGTGGAGCTAGACTCGGGCACCATGGCTGGTGTCTTTCATTGACCTCATCGAACTCTGCT
 CCTGGCTTTGGGCGTCTACTGCTTTCAGGACATGAGACCGGAAGGCCTTCTGGGCTGCTGAGGTTCAA
 GCACTGCTGAAGAATGAGCAGCTGTATCAGCCTCTTCGAGATCGTGAAGATACCCAGTACAGCCGCTTTG
 GAGGGAAGTGGCCCCGGAACAAGAAATCT**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
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).



[View online »](#)

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:	<ol style="list-style-type: none">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:	<u>NM_013487.3</u> , <u>NP_038515.3</u>
RefSeq Size:	1330 bp
RefSeq ORF:	522 bp
Locus ID:	12500
UniProt ID:	<u>P04235</u>
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]