

Product datasheet for **RC208276**

CD3E (NM_000733) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CD3E (NM_000733) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CD3E
Synonyms: IMD18; T3E; TCRE
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC208276 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGTCGGGCACTCACTGGAGAGTTCTGGCCCTCTGCCTCTTATCAGTTGGTGTGGGGCAAGATG
GTAATGAAGAAATGGGTGGTATTACACAGACACCATATAAAGTCTCCATCTCTGGAACCACAGTAATATT
GACATGCCCTCAGTATCCTGGATCTGAAATACTATGGCAACACAATGATAAAAACATAGGCGGTGATGAG
GATGATAAAAACATAGGCAGTATGAGGATCACCTGCTCACTGAAGGAATTTTCAGAATTGGAGCAAAGTG
GTTATTATGTCTGCTACCCAGAGGAAGCAAACCAGAAGATGCGAACTTTTATCTCTACCTGAGGGCAAG
AGTGTGTGAGAACTGCATGGAGATGGATGTGATGTCGGTGGCCACAATTGTCATAGTGGACATCTGCATC
ACTGGGGCTTGCTGCTGCTGGTTACTACTGGAGCAAGAATAGAAAGCCAAGGCCAAGCCTGTGACAC
GAGGAGCGGGTGGTGGCGGAGGCAAAGGGGACAAAACAAGGAGAGGCCACCCACCTGTTCCCAACCCAGA
CTATGAGCCCATCCGAAAGGCCAGCGGACCTGTATTCTGGCCTGAATCAGAGACGCATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208276 protein sequence
 Red=Cloning site Green=Tags(s)

MQSGTHWRVGLCLL SVGVWQDGNEEMGGITQTPYKVISGTTVILTCPQYPGSEILWQHNDKNIGGDE
DDKNIGSDEDHLSLKEFSELEQSGYYVCYPRGSKPEDANFYLYLRARVCENMEMDVMSVATIVIVDICI
TGGLLLL VYYWSKNRKAKAKPVTRGAGAGGRQRGQNKERPPPVPNPDIYEPYIRKGRDLYSGLNQRRY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mk6090_e04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000733

ORF Size: 621 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_000733.4](#)

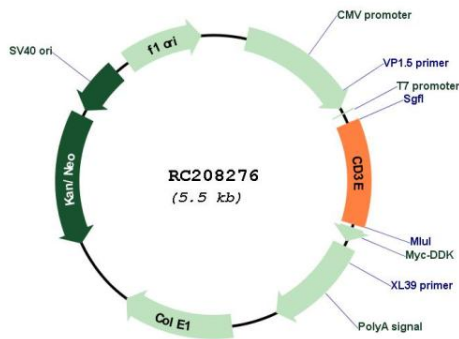
RefSeq Size: 1534 bp

RefSeq ORF: 624 bp

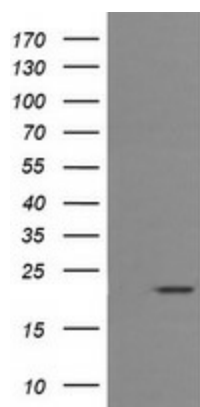
Locus ID: 916

UniProt ID:	<u>P07766</u>
Cytogenetics:	11q23.3
Domains:	ITAM, IGc2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Hematopoietic cell lineage, Primary immunodeficiency, T cell receptor signaling pathway
MW:	23.1 kDa
Gene Summary:	The protein encoded by this gene is the CD3-epsilon polypeptide, which together with CD3-gamma, -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. The epsilon polypeptide plays an essential role in T-cell development. Defects in this gene cause immunodeficiency. This gene has also been linked to a susceptibility to type I diabetes in women. [provided by RefSeq, Jul 2008]

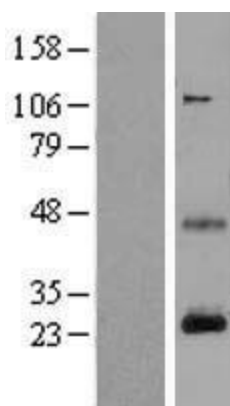
Product images:



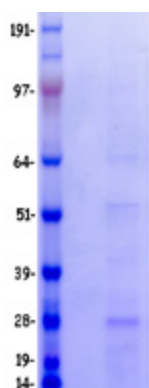
Circular map for RC208276



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CD3E (Cat# RC208276, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CD3E (Cat# [TA506064]). Positive lysates [LY400242] (100ug) and [LC400242] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400242]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208276 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CD3E protein (Cat# [TP308276]). The protein was produced from HEK293T cells transfected with CD3E cDNA clone (Cat# RC208276) using MegaTran 2.0 (Cat# [TT210002]).