

## Product datasheet for **RC215562**

### CD8B (NM\_172213) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD8B (NM_172213) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD8B
Synonyms:	CD8B1; LEU2; LY3; LYT3; P37
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215562 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGGCCGCGGCTGTGGCTCCTCCTGGCCGCGCAGCTGACAGTTCTCCATGGCAACTCAGTCTCCAGC  
AGACCCCTGCATACATAAAGGTGCAAACCAACAAGATGGTGTGCTGCTGCGAGGCTAAAATCTCCCT  
CAGTAACATGCGCATCTACTGGCTGAGACAGCGCCAGGCACCGAGCAGTGACAGTCACCACGAGTTCCTG  
GCCCTCTGGGATCCGCAAAGGGACTATCCACGGTGAAGAGGTGGAACAGGAGAAGATAGCTGTGTTTC  
GGGATGCAAGCCGGTTCATTCTCAATCTCACAGCGTGAAGCCGGAAGACAGTGGCATCTACTTCTGCAT  
GATCGTCGGGAGCCCGAGCTGACCTTCGGGAAGGGAACCTCAGCTGAGTGTGGTTGATTTCTTCCACC  
ACTGCCAGCCCAAGAAGTCCACCCTCAAGAAGAGAGTGTGCCGGTTACCCAGGCCAGAGACCCAGA  
AGGGCCCACTTTGTAGCCCATCACCTTGGCCTGCTGGTGGCTGGCGTCTGGTTCTGCTGGTTTCCCT  
GGGAGTGGCCATCCACCTGTGCTGCCGGCGGAGGAGCCGGCTTCGTTTCATGAAACAGCCTCAAGGG  
GAAGGTATATCAGGAACCTTTGCCCAATGCCTGCATGGATACTACAGCAATACTACAACCTCACAGA  
AGCTGCTTAACCCATGGATCCTGAAAACA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC215562 protein sequence  
 Red=Cloning site Green=Tags(s)

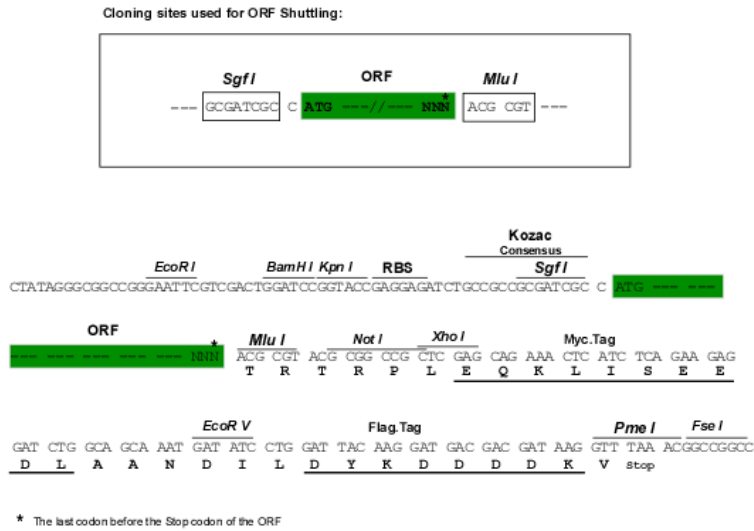
MRPRLWLLAAQLTVLHGNSVLQQTTPAYIKVQTNKMVMLSCEAKISLSNMRIYWLQRQAPSSDSHHEFL  
 ALWDSAKGTIHGEEVEQEKIIVFRDASRFILNLT SVKPEDSGIYFCMIVGSPELTFGKGTQLSVDFLPT  
 TAQPTKKSTLKKRVCRLRPETQKGPLCSPITLGLLVAGVLVLLVSLGVAIHLCCRRRRARLRFMKQPQG  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

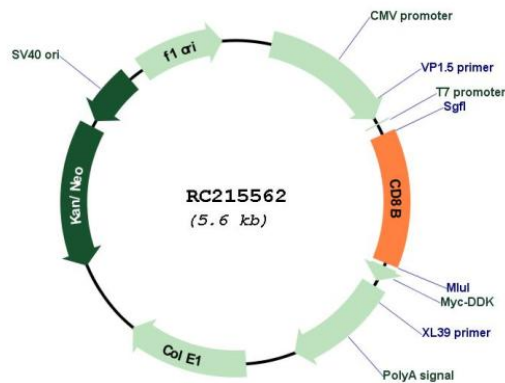
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6449\\_g12.zip](https://cdn.origene.com/chromatograms/mk6449_g12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



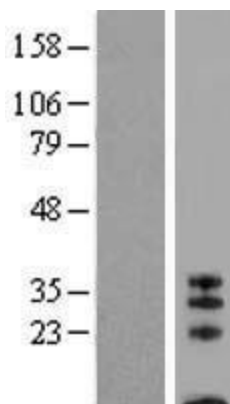
**Plasmid Map:**



**ACCN:** NM\_172213

**ORF Size:** 729 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_172213.1</a> , <a href="#">NP_757362.1</a>
<b>RefSeq Size:</b>	1071 bp
<b>RefSeq ORF:</b>	732 bp
<b>Locus ID:</b>	926
<b>UniProt ID:</b>	<a href="#">P10966</a>
<b>Cytogenetics:</b>	2p11.2
<b>Protein Families:</b>	Druggable Genome, Secreted Protein, Transmembrane
<b>Protein Pathways:</b>	Antigen processing and presentation, Cell adhesion molecules (CAMs), Hematopoietic cell lineage, Primary immunodeficiency, T cell receptor signaling pathway
<b>MW:</b>	27.2 kDa
<b>Gene Summary:</b>	The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. The CD8 antigen, acting as a coreceptor, and the T-cell receptor on the T lymphocyte recognize antigens displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The functional coreceptor is either a homodimer composed of two alpha chains, or a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains. This gene encodes the CD8 beta chain isoforms. Multiple alternatively spliced transcript variants encoding distinct membrane associated or secreted isoforms have been described. A pseudogene, also located on chromosome 2, has been identified. [provided by RefSeq, May 2010]

**Product images:**

Western blot validation of overexpression lysate (Cat# [LY406743]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215562 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).