

## **Product datasheet for RC220206**

## CD8B (NM\_172102) Human Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** CD8B (NM\_172102) 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 >RC220206 representing NM\_172102

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

**CTGAAAACA** 

ACAAGGATGACGACGATAAGGTTTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



>RC220206 representing NM\_172102 **Protein Sequence:** 

Red=Cloning site Green=Tags(s)

MRPRLWLLLAAQLTVLHGNSVLQQTPAYIKVQTNKMVMLSCEAKISLSNMRIYWLRQRQAPSSDSHHEFL ALWDSAKGTIHGEEVEQEKIAVFRDASRFILNLTSVKPEDSGIYFCMIVGSPELTFGKGTQLSVVDFLPT TAOPTKKSTLKKRVCRLPRPETOKGRRRRARLRFMKQPOGEGISGTFVPOCLHGYYSNTTTSOKLLNPWI

LKT

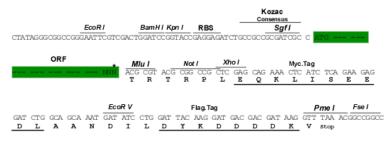
**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

**Chromatograms:** https://cdn.origene.com/chromatograms/ja3148 c06.zip

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM 172102

**ORF Size:** 639 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by

calling 301.340.3188 option 3 for pricing and delivery.

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.



Cytogenetics:

**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.

2p11.2

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 172102.4</u>

 RefSeq Size:
 981 bp

 RefSeq ORF:
 642 bp

 Locus ID:
 926

 UniProt ID:
 P10966

**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: Antigen processing and presentation, Cell adhesion molecules (CAMs), Hematopoietic cell

lineage, Primary immunodeficiency, T cell receptor signaling pathway

MW: 24.3 kDa

**Gene Summary:** The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that

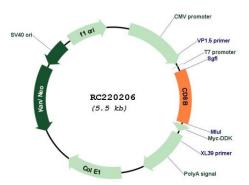
mediates efficient cell-cell interactions within the immune system. The CD8 antigen, acting as a coreceptor, and the T-cell receptor on the T lymphocyte recognize antigens displayed by an

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:**



Circular map for RC220206