

## Product datasheet for **RG215619**

### CD8B (NM\_004931) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CD8B (NM\_004931) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** CD8B  
**Synonyms:** CD8B1; LEU2; LY3; LYT3; P37  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG215619 representing NM\_004931  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCGGCCGCGGCTGTGGCTCCTCTTGGCCGCGCAGCTGACAGTTCTCCATGGCAACTCAGTCTCCAGC  
 AGACCCCTGCATACATAAAGGTGCAAACCAACAAGATGGTGATGCTGTCTGCGAGGCTAAAATCTCCCT  
 CAGTAACATGCGCATCTACTGGCTGAGACAGCGCCAGGCACCGAGCAGTGACAGTCACCACGAGTTCCTG  
 GCCCTCTGGGATCCGCAAAGGGACTATCCACGGTGAAGAGGTGGAACAGGAGAAGATAGCTGTGTTTC  
 GGGATGCAAGCCGGTTCATTCTCAATCTCACAAGCGTGAAGCCGGAAGACAGTGGCATCTACTTCTGCAT  
 GATCGTCGGGAGCCCGAGCTGACCTTCGGAAGGGAACTCAGCTGAGTGTGGTTGATTTCTTCCACC  
 ACTGCCAGCCCAAGAAGTCCACCCTCAAGAAGAGAGTGTGCCGGTTACCCAGGCCAGAGACCCAGA  
 AGGGCCCACTTTGTAGCCCATCACCTTGGCCTGCTGGTGGCTGGCTCCTGGTTCTGCTGGTTTCCCT  
 GGGAGTGGCCATCCACCTGTGCTGCCGGCGGAGGAGCCCGCTTCGTTTCATGAACAATTTACAAA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG215619 representing NM\_004931  
 Red=Cloning site Green=Tags(s)

MRPRLWLLAAQLTVLHGNSVLQQTTPAYIKVQTNKMVMLSCEAKISLSNMRIYWLQRQAPSSDSHHEFL  
 ALWDSAKGTIHGEEVEQEKIAVFRDASRFILNLSVKPEDSGIYFCMIVGSPELTFGKGTQLSVDFLPT  
 TAQPTKSTLKKRVCRLRPETQKGPLCSPITLGLLVAGVLVLLVSLGVAIHLCCRRRRARLRFMKQFYK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI





**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\\_004931.5](#)

**RefSeq Size:** 1433 bp

**RefSeq ORF:** 633 bp

**Locus ID:** 926

**UniProt ID:** [P10966](#)

**Cytogenetics:** 2p11.2

**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

**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]