

## Product datasheet for MC208268

### Cd8b1 (NM\_009858) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cd8b1 (NM_009858) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cd8b1
Synonyms:	Cd8b; Ly-3; Ly-C; Lyt-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208268 representing NM_009858 Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGCCATGGCTCTGGCTGGTCTTCAGTATGAAGCTGGCAGCTCTCTGGAGCAGCTCTGCCCTCATTC  
AGACCCCTTCGTCCTGCTGGTTCAAACCAACCATACGGCAAAGATGTCCTGTGAGGTTAAAAGCATCTC  
TAAGTTAAACAAGCATCTACTGGCTGCGGGAGCGCCAGGACCCCAAGGACAAGTACTTTGAGTTCCTGGCC  
TCCTGGAGTTCTCCAAGGAGTTTGTATGGTAAAAGTGTGGACAAGAAAAGAAATATAATTCTTGAGT  
CTTCAGACTCAAGACGGCCCTTCTCAGTATCATGAATGTGAAGCCAGAGGACAGTGACTTCTACTTCTG  
CGCGACGGTTGGGAGCCCAAGATGGTCTTTGGGACAGGGACGAAGCTGACTGTGGTTGATGTCCTTCTC  
ACAACTGCCCCAACCAAGAAGACTACCCTGAAGATGAAGAAGAAGAAGCAATGCCCGTTCCCCACCCAG  
AGACCCAGAAGGGCTGACATGCAGCCTTACCACCCTCAGCCTGCTGGTAGTCTGCATCCTGCTTCTGCT  
GGCATTCTCGGAGTGGCCGTCTACTTTTACTGTGTGCGGAGGAGAGCCCGAATTCACCTCATGAAACAG  
TTTCACAAATGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms:	<a href="https://cdn.origene.com/chromatograms/ja1632_b09.zip">https://cdn.origene.com/chromatograms/ja1632_b09.zip</a>
Restriction Sites:	Sgfl-Mlul
ACCN:	NM_009858
Insert Size:	642 bp



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<b>OTI Disclaimer:</b>	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).
<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_009858.2</a> , <a href="#">NP_033988.1</a>
<b>RefSeq Size:</b>	1416 bp
<b>RefSeq ORF:</b>	642 bp
<b>Locus ID:</b>	12526
<b>UniProt ID:</b>	<a href="#">P10300</a>
<b>Cytogenetics:</b>	6 32.14 cM
<b>Gene Summary:</b>	Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class I molecule:peptide complex. The antigens presented by class I peptides are derived from cytosolic proteins while class II derived from extracellular proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class I proteins presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. A palmitoylation site in the cytoplasmic tail of CD8B chain contributes to partitioning of CD8 into the plasma membrane lipid rafts where signaling proteins are enriched. Once LCK recruited, it initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T-lymphocytes (CTLs). Additionally, plays a critical role in thymic selection of CD8+ T-cells.[UniProtKB/Swiss-Prot Function]