

## Product datasheet for **MC208266**

### Cd8a (NM\_001081110) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cd8a (NM\_001081110) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Cd8a  
**Synonyms:** BB154331; Ly-2; Ly-35; Ly-B; Lyt-2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >MC208266 representing NM\_001081110  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCGGACCGAGACAGCGGCAGCGAGCAGGGTGGTGCGGCGCTGGGCTCGGGCGGCTCCCTAGGGCACC  
 CGGGCTCGGGCTCAGGCTCCGGCGGGGGCGGTGGTGGCGCGGGGGCGGGCGGCGAGTGGCGGGCGG  
 CGGGGCCCGGGGGGCTGCAGCACGAGACGCAGGAGCTGGCCTCCAAGCGGGTGGACATCCAGAACAAG  
 CGTTTCTACCTGGACGTGAAGCAGAACGCTAAGGGCCGTTTCTGAAGATCGCAGAGGTGGGCGCTGGCG  
 GCAACAAGAGCCGCTCACCTCTCCATGTCTGTGGCCGTGGAGTTCGCGACTACCTGGGCGACTTCAT  
 CGAGCACTACGCGCAGCTGGGCCCCAGCCAGCCACCCGACTGGCCAGGCACAGGACGAGCCACGCCGG  
 GCGCTCAAGAGCGAGTTCCTGGTGCAGCAAAACCGCAAGTACTACATGGATCTCAAGGAGAACCAGCGCG  
 GCCGCTTCTGCGCATCCGCCAGACAGTCAACCGGGGGCCCGCCTGGGCTCCACGCAGGGCCAGACCAT  
 TGCGCTGCCCCGCACAGGGTCTCATCGAGTTCGCTGACGCTCTGGCCAAGCTCATCGACGACTATGGAGTG  
 GAGGAGGAGCCGGCCGAGCTGCCGAGGGCACCTCCTTGACTGTGGACAACAAGCGCTTCTTCTTCGATG  
 TGGTTCCAACAAGTACGGCGTGTATGCGAGTGAGTGAGGTGAAGCCACCTACCGCAACTCCATCAC  
 CGTGCCCTACAAGGTGTGGCCAAGTTCGGACACACCTTCTGCAAGTACTCCGAGGAGATGAAGAAGATT  
 CAAGAGAAACAGAGGGAGAAGCGGGCCGCTTGTGAGCAGCTCCACCAGCAACAGCAGCAGCAAGAGG  
 AGACCACCGCTGCCACCTGCTACTGCAGGGCGAGGAAGAAGGGGAAGAAGAT**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001081110



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<b>Insert Size:</b>	966 bp
<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>	<u><a href="#">NM_001081110.2</a></u> , <u><a href="#">NP_001074579.1</a></u>
<b>RefSeq Size:</b>	3130 bp
<b>RefSeq ORF:</b>	744 bp
<b>Locus ID:</b>	12525
<b>UniProt ID:</b>	<u><a href="#">P01731</a></u>
<b>Cytogenetics:</b>	6 32.14 cM
<b>Gene Summary:</b>	<p>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. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T-lymphocytes (CTLs). This mechanism enables CTLs to recognize and eliminate infected cells and tumor cells. In NK-cells, the presence of CD8A homodimers at the cell surface provides a survival mechanism allowing conjugation and lysis of multiple target cells. CD8A homodimer molecules also promote the survival and differentiation of activated lymphocytes into memory CD8 T-cells.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.</p>