

Product datasheet for **SC118844**

HLA DMB (HLA-DMB) (NM_002118) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HLA DMB (HLA-DMB) (NM_002118) Human Untagged Clone
Tag:	Tag Free
Symbol:	HLA DMB
Synonyms:	D6S221E; RING7
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118844 sequence for NM_002118 edited (data generated by NextGen Sequencing)

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ATGATCACATTCCCTGCCGCTGCTGCTGGGGCTCAGCCTGGGCTGCACAGGAGCAGGTGGC
TTCGTGGCCCATGTGAAAGCACCTGTCTGTTGGATGATGCTGGGACTCCAAAGGATTTTC
ACATACTGCATCTCCTTCAACAAGGATCTGCTGACCTGCTGGGATCCAGAGGAGAATAAG
ATGGCCCCTTGCGAATTTGGGGTCTGAATAGCTTGGCGAATGCCTCTCACAGCACCTC
AACCAAAAAGACACCCTGATGCAGCGCTTGCGCAATGGGCTTCAGAATTGTCCACACAC
ACCCAGCCCTTCTGGGGATCACTGACCAACAGGACACGGCCACCATCTGTGCAAGTAGCC
AAAACCACTCCTTTTAAACAGAGGGAGCCTGTGATGCTGGCCTGCTATGTGTGGGGCTTC
TATCCAGCAGAAGTGACTATCACGTGGAGGAAGAACGGGAAGCTTGTGCATGCCTCACAGC
AGTGCGCACAAGACTGCCAGCCCAATGGAGACTGGACATACCAGACCCTCTCCCATTTA
GCCTTAAACCCCTCTTACGGGGACACTTACACCTGTGTGGTAGAGCACACTGGGGCTCCT
GAGCCCATCCTTCGGGACTGGACACCTGGGCTGTCCCCATGCAGACCCTGAAGGTTTCT
GTGTCTGCAGTGACTCTGGGCTGGGCCTCATCATCTTCTCTCTTGGTGTGATCAGCTGG
CGGAGAGCTGGCCACTCTAGTTACACTCCTTCTCTGGGTCCAATTATTCAGAAGGATGG
CACATTCCTAG

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Clone variation with respect to NM_002118.4



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002118 unedited
 GGTTCGNNATTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACGAGGCCACAT
 CACTCATTGGGGGGTCAAGGGACCCGGCAATATAGTATTCTGCTCAGTGTCTGGAGAT
 CATCTACCCAGGCTGGGGCTTCTGGGACAGGCGAGGACCCACGGACCCTGGAAGAGCTGG
 TCCAGGGGACTGAACTCCCGCATCTTTACAGAGCAGAGCATGATCACATTCTGCCGCT
 GCTGCTGGGGCTCAGCCTGGGCTGCACAGGAGCAGGTGGCTTCGTGGCCCATGTGGAAAG
 CACTGTCTGTTGGATGATGCTGGGACTCCAAAGGATTTACATACTGCATCTCCTTCAA
 CAAGGATCTGCTGACCTGCTGGGATCCAGAGGAGAATAAGATGGCCCTTGCGAATTTGG
 GGTGCTGAATAGCTTGGCGAATGTCCTCTCACAGCACCTCAACCAAAAAGACACCCTGAT
 GCAGCGCTTGGCAATGGGCTTCAGAATTGTGCCACACACACCCAGCCCTTCTGGGGATC
 ACTGACCAACAGGACACGGCCACCATCTGTGCAAGTAGCCAAAACCACTCCTTTAAACAC
 GAGGGAGCCTGTGATGCTGGCCTGCTATGTGTGGGGCTTCTATCCAGCAGAAGTGACTAT
 CACGTGGAGGAAGAACGGGAAGCTTGTATGCCTCACAGCAGTGCACACAAGACTGCCCA
 GCCAATGGAGACTGGACATACCAGACCCTCTCCATTTAGCCTTAACCCCTCTTACCG
 NGACACTTACACCTGTGTGGTAGAGCACACTGGGGCTTCTGAGCCATCCTTCGGNACTGG
 ACACCTGNGCTGTCCCATGCAGACCCTGAAGTTTCTGTGTCTGCAGTGACT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002118 unedited
 CCCGCAATCNAAGTCGAGTT
 TTTTTTTTTTTTTTCCACCAAAGTTATTTTTTTGAAACAATCACCAGTTGTTGTCCT
 TTATGGCACACTGAAACCCCGAGAGGGTTTTAACTCCCTTCTAAAATTATATTCATC
 CCAAAAAATATACCCTTGGACAATATTTTGGTTACAGCATAACCCAGAAAGGGGGCCCC
 CAAGTTGCTAATTTTTACATAGGGGAACTGGGAAATTAATAAATTGGATGGAAAAACC
 TTAGGATCCAAAAATATTGTCGGGGGTTAAAAATGTTGAAAAGGCATGGAACCATATTG
 AGTTGAAATCTCCTTCTCACTTGGAGGGAAATTTGCAAAATTCTCCCTTATAGGAAAGCG
 CCATCCTTCTGAATAATGGGCCCCAGAAAAAGGAGGGTAACTAAAGGGGCCAGTTTTCCC
 CCAGTTGATCCCCCAAAAAAAAAAATGATGAGGCCACGCCCAAAGTCACTGAAAAACAC
 AAAAACCTTAAGGGTCTGATTGGGGGACACCCCAAGGGTCCACCCCGAGGGTGGGCTAA
 GGACCCCGAGGGGCCCTACCACACGGGGTAATTTCCCTAAAGGGGGCCAAACGCTATAT
 GGAAAGGGCCCGTCTCCCAATTCTATTGGGCTGGCAACCTTCCCCCCTGTCCGGCAG
 GTCCCAACTTCGCCGTGTTTCTCCCGCCATCCCCTTTGTTTGA AAAACGCGACATGG
 CCCGCACCTTTCCGGCCCTCAGCTAAAAGAGGGCTTTTTTTTTTCTACATGTGGTAAAA
 CCACGCGGAAAAGACACCCCAAGGCCGCGCCCGCCATCACCTCCGTCTTTCTCCACTC
 CATATACCAAAAATTCTCCCGTTCGTGTTTCTGTACCTTCCAG

Restriction Sites:

NotI-NotI

ACCN:

NM_002118

Insert Size:

1470 bp

OTI Disclaimer:

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).

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:	<ol style="list-style-type: none">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_002118.3 , NP_002109.1
RefSeq Size:	1358 bp
RefSeq ORF:	792 bp
Locus ID:	3109
UniProt ID:	P28068
Cytogenetics:	6p21.32
Domains:	MHC_II_beta, ig, IGc1
Protein Families:	Transmembrane
Protein Pathways:	Allograft rejection, Antigen processing and presentation, Asthma, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Graft-versus-host disease, Systemic lupus erythematosus, Type I diabetes mellitus, Viral myocarditis
Gene Summary:	HLA-DMB belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DMA) and a beta (DMB) chain, both anchored in the membrane. It is located in intracellular vesicles. DM plays a central role in the peptide loading of MHC class II molecules by helping to release the CLIP (class II-associated invariant chain peptide) molecule from the peptide binding site. Class II molecules are expressed in antigen presenting cells (APC: B lymphocytes, dendritic cells, macrophages). The beta chain is approximately 26-28 kDa and its gene contains 6 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain and exon 5 encodes the cytoplasmic tail. [provided by RefSeq, Jul 2008]