

## Product datasheet for **SC118846**

### HLA-DPB1 (NM\_002121) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HLA-DPB1 (NM_002121) Human Untagged Clone
Tag:	Tag Free
Symbol:	HLA-DPB1
Synonyms:	DPB1; HLA-DP; HLA-DP1B; HLA-DPB
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118846 sequence for NM_002121 edited (data generated by NextGen Sequencing)

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ATGATGGTTCTGCAGTTTCTGCGGCCCCCGGACAGTGGCTCTGACGGCGTTACTGATG
GTGCTGCTCACATCTGTGGTCCAGGGCAGGGCCACTCCAGAGAATTACCTTTTCCAGGGA
CGGCAGGAATGCTACGCGTTTAATGGGACACAGCGCTTCTGGAGAGATACATCTACAAC
CGGGAGGAGTTTCGCGCGCTTCGACAGCGACGTGGGGGAGTTCCGGGCGGTGACGGAGCTG
GGGCGGCCTGCTGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCA
GTGCCGGACAGGATGTGCAGACACAACACTACGAGCTGGGCGGGCCCATGACCCTGCAGCGC
CGAGTCCAGCCTAGGGTGAATGTTTCCCCTCCAAGAAGGGGCCCTTGCAGCACCACAAC
CTGCTTGTCTGCCACGTACGGATTTCTACCCAGGCAGCATTCAAGTCCGATGGTTCTCTG
AATGGACAGGAGAAACAGCTGGGGTTCGTGCCACCAACCTGATCCGTAATGGAGACTGG
ACCTTCCAGATCCTGGTATGCTGGAAATGACCCCCAGCAGGGAGATGTCTACACCTGC
CAAGTGGAGCACACCAGCCTGGATAGTCCTGTACCCGTGGAGTGAAGGCACAGTCTGAT
TCTGCCCGGAGTAAGACATTGACGGGAGCTGGGGGCTTCGTGCTGGGGCTCATCATCTGT
GGAGTGGGCATCTTATGCACAGGAGGCAAGAAAGTTCAACGAGGATCTGCATAA

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Clone variation with respect to NM\_002121.5



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_002121 unedited</p> <pre> TTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTTTTCATTTTGCC ATCCTTTTCCAGCTCCATGATGGTTCTGCAGGTTTCTGCGGCCCGGACAGTGCTCT GACGGCGTTACTGATGGTGTCTCACATCTGTGGTCCAGGGCAGGGCCACTCCAGAGAA TTACCTTTTCCAGGGACGGCAGGAATGCTACGCGTTTAAATGGGACACAGCGCTTCCTGGA GAGATAACATCTACAACCGGGAGGAGTTTCGCGCGCTTCGACAGCGACGTGGGGGAGTCCG GGCGGTGACGGAGCTGGGGCGGCTGCTGCGGAGTACTGGAACAGCCAGAAGGACATCCT GGAGGAGAAGCGGCAGTGCCGGACAGGATGTGCAGACAACTACGAGCTGGGCGGGCC CATGACCCTGCAGCGCCGAGTCCAGCCTAGGGTGAATGTTTCCCCTCCAAGAAGGGGCC CTTGACAGCACCACAACCTGCTTGTCTGCCACGTGACGGATTTCTACCCAGGCAGCATTCA AGTCCGATGGTTCCTGAATGGACAGGAGGAAACAGCTGGGGTCTGTCCACCAACCTGAT CCGTAATGGAGACTGGACCTTCCAGATCCTGGTGTGCTGAAATGACCCCCAGCAGGG AGATGTCTACACCTGCCAAGTGGAGCACACCAGCCTGGATAGTCTGTACCCGTGGAGTG GAAGGCACAGTCTGATTCTGCCCGNAGTAGACATTGACGGGAGCTGGGGCTTCGTGCT GGGGCTCATCATCTGTGGAGTGGGCATCTTCATGCACAGNAGGAGCAGAAAGNTTCACG AGGNATCTGCATAACAGGNTCCTGAGCTCACTGAAAAGACTATTGTGCCTTTAGNAAAG CATTNGCTGTGTTNCGNTAGCATCTGGCTNCC </pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_002121 unedited</p> <pre> CGGCCGTTTTAGNATCGAGTTTTTTTTTTTTTTTTTTTATGTTGGGTTTTGATTATTTGT GGTGCTAAAAAAGGAACATGGTTGGAGGCCAGTGAGAGAAACAGTGCTTTGAATCAA AGAGCAGAATGATAGAACTGACTTCAGAGCAACTTCTTGGCAGCAGTATCCAATTTGGA AGTTGAAGGTCTGTCCTGGAGCCAGATGCTAACGAAACACAGCAAATGCTTTTCCTAAGG CACAATAGTCTTTTCAGTGAGCTCAGGAACCCTGTTTATGCAGATCCTCGTTGAACTTTC TTGCTCCTCTGTGCATGAAGATGCCCACTCCACAGATGATGAGCCCCAGCACGAAGCCC CCAGTCCCCTCAATGTCTTACTCCGGGCAGAATCAGACTGTGCCTTCCACTCCACGGTG ACAGGACTATCCAGGCTGGTGTGCTCCACTTGGCAGGTGTAGACATCTCCCTGTGGGGG GTCATTTCCAGCATCACCAGGATCTGGAAGTCCAGTCTCCATTACGGATCAGGTTGGTG GACACGACCCAGCTGTTTCTCCTGTCCATTAGGAACCATCGGACTTGAATGCTGCCT GGGTAGAAATCCGTCACGTGGCAGACAAGCAGGTTGTGGTGTGCAAGGGCCCCCTCTTG GAGGGGAAACATTACCCTAGGCTGGACTCGGCCTGCAGGTCATGGGCCCGCCAGC TCGTAGTTGTGTGCACATCCTGTCCGCACTGCCCGCTTCTCCTCCAGNATGTCTTN CTGGNCTGTTTCACTACTNCGCAGCAGGCCGCCAGCTTCGTACCCGNCCGGAATCCNC CACGTGCTGTGACGCGCGAACTCCTCCCGNTGTAGATGTATCTTTCAGAAAGCG CTGNNGTCCATTAACCGGTAGCATTCTGCGTCCCTGGNAAANGTANTNCTCTGNAGT GGCCCTGCCCTGNACCCAGNAGTGAGCC </pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_002121
<b>Insert Size:</b>	1050 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>	<a href="#">NM_002121.4</a> , <a href="#">NP_002112.3</a>
<b>RefSeq Size:</b>	1501 bp
<b>RefSeq ORF:</b>	777 bp
<b>Locus ID:</b>	3115
<b>UniProt ID:</b>	<a href="#">P04440</a>
<b>Cytogenetics:</b>	6p21.32
<b>Domains:</b>	MHC_II_beta, ig, IGc1
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	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
<b>Gene Summary:</b>	HLA-DPB belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DPA) and a beta chain (DPB), both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. 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. Within the DP molecule both the alpha chain and the beta chain contain the polymorphisms specifying the peptide binding specificities, resulting in up to 4 different molecules. [provided by RefSeq, Jul 2008]