

Product datasheet for SC320914

HLA-DPB1 (NM_002121) Human Untagged Clone

Product data:

OriGene Technologies, Inc.

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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:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<pre>>OriGene sequence for NM_002121.4 GCTCTTTTCATTTTGCCATCCTTTTCCAGCTCCATGATGGTTCTGCAGGTTTCTGCGGCC CCCCGGACAGTGGCTCTGACGGCGTTACTGATGGTGCTGCTCACATCTGTGGTCCAGGGC AGGGCCACTCCAGAGAATTACGTGCACCAGTTACGGCAGGAATGCTACGCGTTTAATGGG ACACAGCGCTTCCTGGAGAGATACATCTACAACCGGGAGGAGTTCGTGCGCTTCGACAGC GACGTGGGGGAGTTCCGGGCGGTGACCGAGCGGGCGGCGGCCTGATGAGGACTACTGGAAC AGCCAGAAGGACATCCTGGAGGAGGAGCGGGCAGTGCCGGACAGGATGTGCCAGACCAAC TACGAGCTGGACGAGGCCGTGACCCTGCAGCGCCGAGTCCAGCCTAGGGTGAATGTTTCC CCCTCCAAGAAGGGGCCCTTGCAGCACCACACCTGCTTGTCTGCCACGTGACGGATTTC TACCCAGGCAGCATTCAAGTCCGATGGTTCCTGAATGGACAGGAGGAAACAGCTGGGGTC GTGTCCACCAACCTGATCCGTAATGGAGACTGGACCTTCCAGATCCTGGTGATGCTGGAA ATGACCCCCCCAGCAGGAGAGGACGCACAGTCTGATTCGGAGCACCAGCCTGGAGGATAGT CCTGTCACCGTGGAGTGGA</pre>
Restriction Sites:	Please inquire
ACCN:	NM_002121



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SC320914 HLA-DPB1 (NM_002121) Human Untagged Clone – SC320914	
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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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:	<u>NM 002121.4, NP 002112.3</u>
RefSeq Size:	1501 bp
RefSeq ORF:	777 bp
Locus ID:	3115
UniProt ID:	<u>P04440</u>
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-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

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molecules. [provided by RefSeq, Jul 2008]