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Product datasheet for SC315937

HLA-DRB4 (NM_021983) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HLA-DRB4 (NM_021983) Human Untagged Clone
Tag:	Tag Free
Symbol:	HLA-DRB4
Synonyms:	DR4; DRB4; HLA-DR4B; HLA-DRB4*
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_021983 edited
GGGGGGCCATAGTTCTCCCTGATTGAGACTTGCCTGCTGCTGTGACCACTGGTCTTGTCC
TCTTCTCCAGCATGGTGTGTCTGAAGCTCCCTGGAGGCTCCTGTATGGCAGCGCTGACAG
TGACATTGACGGTGCTGAGCTCCCCACTGGCTTTGGCTGGGGACACCCAACCACGTTTCT
TGGAGCAGGCTAAGTGTGAGTGTCATTTCCTCAATGGGACGGAGCGAGTGTGGAACCTGA
TCAGATACATCTATAACCAAGAGGAGTACGCGCGCTACAACAGTGACCTGGGGGAGTACC
AGGCGGTGACGGAGCTGGGGCGGCCTGACGCTGAGTACTGGAACAGCCAGAAGGACCTCC
TGGAGCGGAGGCGGGCCGAGGTGGACACCTACTGCAGATACAACTACGGGGTTGTGGAGA
GCTTCACAGTGCAGCGGCGAGTCCAACCTAAGGTGACTGTGTATCCTTCAAAGACCCAGC
CCCTGCAGCACCACAACCTCCTGGTCTGCTCTGTGAATGGTTTCTATCCAGGCAGCATTG
AAGTCAGGTGGTTCCGGAACGGCCAGGAAGAGAAGGCTGGGGTGGTGTCCACAGGCCTGA
TCCAGAATGGAGACTGGACCTTCCAGACCCTGGTGATGCTGGAAACAGTTCCTCGGAGTG
GAGAGGTTTACACCTGCCAAGTGGAGCATCCAAGCATGATGAGCCCTCTCACGGTGCAAT
GGAGTGCACGGTCTGAATCTGCACAGAGCAAGATGCTGAGTGGAGTCGGGGGCTTTGTGC
TGGGCCTGCTCTTCCTTGGGACAGGGCTGTTCATCTACTTCAGGAATCAGAAAGGACACT
CTGGACTTCAGCCAACAGGACTCTTGAGCTGAAGTGCAGATGACCACATTCAAGGAAGAA
CCTTCTGCCCCAGCTTTGCAAGATGAAAAGCTTTCCCACTTGGCTCTTATTCTTCCACAA
GAGCTTTGTCAGGACCAGGTTGTTACTGGTTCAGCAACTCTGCAGAAAATGTCCTCCCTT
GTGGCTTCCTTAGCTCCTGTTCTTGGCCTGAAGCCTCACAGCTTTGATGGCAGTGCCTCA
TCTTCAACAGGAGAATCACTTGTAACCCGGGAGGCAGGTTCCGGTGAGACAAGATCACGC
CATTGCACTCCAGCATGGGCAAAAAGAGGTAAAAACTCCTGTCAAAAAAAAAAAAAAAAA
AA

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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_021983 unedited
ATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCACTGGTCTTGTCCTCTTCT
CCAGCATGGTGTGTCTGAAGCTCCCTGGAGGCTCCTGTATGGCAGCGCTGACAGTGACAT
TGACGGTGCTGAGCTCCCCACTGGCTTTGGCTGGGGACACCCAACCACGTTTCTTGGAGC
AGGCTAAGTGTGAGTGTCATTTCCTCAATGGGACGGAGCGAGTGTGGAACCTGATCAGAT
ACATCTATAACCAAGAGGAGTACGCGCGCTACAACAGTGACCTGGGGGGAGTACCAGGCGG
TGACGGAGCTGGGGCGGCCTGACGCTGAGTACTGGAACAGCCAGAAGGACCTCCTGGAGC
GGAGGCGGGCCGAGGTGGACACCTACTGCAGATACAACTACGGGGTTGTGGAGAGCTTCA
CAGTGCAGCGGCGAGTCCAACCTAAGGTGACTGTGTATCCTTCAAAGACCCAGCCCCTGC
AGCACCACAACCTCCTGGTCTGCTCTGTGAATGGTTTCTATCCAGGCAGCATTGAAGTCA
GGTGGTTCCGGAACGGCCAGGAAGAGAAGGCTGGGGTGGTGTCCACAGGCCTGATCCAGA
ATGGAGACTGGACCTTCCAGACCCTGGTGATGCTGGAAACAGTTCCTCGGAGTGGAGAGG
TTTACACCTGCCAAGTGGAGCATCCAAGCATGATGAGCCCTCTCACGGTGCAATGGAGTG
CACGGTCTGAATCTGCACAGAGCAAGATGCTGAGTGGAGTCGGNGGCTTTGTGCTNGGCC
TGCTCTTCCTTTGGACAGGNCTGTTCATCTACTTNCAGAATCAGAAGGACACTCTGGACT
TTCAGCCACAGACTCTTGAGCTGAAGTGCAGATGACCACATCAGGNAGAACCTCTGCCCN
ACTTGCAGATGAAAGCTTCCACTNGCTCTTATCTTCCAGAGCTTGTCAGACAGNTGTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_021983 unedited
CTATGGACCGCGTGCCGCAATTTANNGATCGGTTTTTTTTTTTTTTTTTTGACAGGAGT
TTTTACCTCTTTTTGCCCATGCTGGAGTGCAATGGCGTGATCTTGTCTCACCGGAACCTG
CCTCCCGGGTTACAAGTGATTCTCCTGTTGAAGATGAGGCACTGCCATCAAAGCTGTGAG
GCTTCAGGCCAAGAACAGGAGCTAAGGAAGCCACAAGGGAGGACATTTTCTGCAGAGTTG
CTGAACCAGTAACAACCTGGTCCTGACAAAGCTCTTGTGGAAGAATAAGAGCCAAGTGGG
AAAGCTTTTCATCTTGCAAAGCTGGGGCAGAAGGTTCTTCCTTGAATGTGGTCATCTGCA
CTTCAGCTCAAGAGTCCTGTTGGCTGAAGTCCAGAGTGTCCTTTCTGATTCCTGAAGTAG
ATGAACAGCCCTGTCCCAAGGAAGAGCAGGCCCAGCACAAAGCCCCCGACTCCACTCAGC
ATCTTGCTCTGTGCAGATTCAGACCGTGCACTCCATTGCACCGTGAGAGGGCTCATCATG
CTTGGATGCTCCACTTGGCAGGTGTAAACCTCTCCACTCCGAGGAACTGTTTCCAGCATC
ACCCAGGGGCTGGGAGGTCCAGTCTCCATTCTGGATCAGGCCTGTGGACACCACCCCAGC
CTTCTCTTTCTGGCCGTTTCGGGACCACCTGACTTCAATGCTGCCTGGATAGAAAACACT
TCCAGAGCAGACCACGAGGTTGTGGGTGCTGCAAGGGCCTGGTCTTTTTAGGGATACACA
GCCCCCTTAAGTTGGGACTCGCCGCTGCCCTGTGAAGCTTCTCCCACCCCCTAGTTGTTT
TGCAGAAGTGTCCCCCTCGGCCGCCTCCCTTCAGAGGGCCTTCTGGTGTGCAGTACTAAG
GTAGGGCGCCCAATTCCTACCGGTGGGACTCCCCCGGACATGTTGTACGGC

Restriction Sites: NotI-NotI

ACCN: NM_021983

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: The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.

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:	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_021983.4, NP_068818.4
RefSeq Size:	1193 bp
RefSeq ORF:	801 bp
Locus ID:	3126
UniProt ID:	P13762
Cytogenetics:	6p21.3
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, Hematopoietic cell lineage, Systemic lupus erythematosus, Type I diabetes mellitus, Viral myocarditis
Gene Summary:	HLA-DRB4 belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DRA) and a beta (DRB) chain, 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. 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 DR molecule the beta chain contains all the polymorphisms specifying the peptide binding specificities. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. There are multiple pseudogenes of this gene. [provided by RefSeq, Feb 2020]