

Product datasheet for TP318764

OriGene Technologies, Inc.

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HLA-DRB1 (NM_002124) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human major histocompatibility complex, class II, DR beta 1 (HLA-

DRB1), 20 µg

Species: Human Expression Host: HEK293T

Expression cDNA Clone >Peptide sequence encoded by RC218764 or AA Sequence: Blue=ORF Red=Cloning site Green=Tag(s)

MVCLKLPGGSCMTALTVTLMVLSSPLALSGDTRPRFLWQPKRECHFFNGTERVRFLDRYFYNQEESVRF DSDVGEFRAVTELGRPDAEYWNSQKDILEQARAAVDTYCRHNYGVVESFTVQRRVQPKVTVYPSKTQPL QHHNLLVCSVSGFYPGSIEVRWFLNGQEEKAGMVSTGLIQNGDWTFQTLVMLETVPRSGEVYTCQVEHP

SVTSPLTVEWRARSESAQSKMLSGVGGFVLGLLFLGAGLFIYFRNQKGHSGLQPTGFLS

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Recombinant protein using RC218764 also available, TP318764M

Tag: C-Myc/DDK

Predicted MW: 29.9 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 002115

Locus ID: 3123



HLA-DRB1 (NM_002124) Human Recombinant Protein - TP318764

UniProt ID: <u>P04229</u>, <u>P01911</u>, <u>D7RIH8</u>, <u>A0A224MM52</u>, <u>X5DNQ0</u>

RefSeq Size: 1182 Cytogenetics: 6p21.32 RefSeq ORF: 798

Synonyms: DRB1; HLA-DR1B; HLA-DRB; SS1

Summary: HLA-DRB1 belongs to the HLA class II beta chain paralogs. The class II molecule is a

heterodimer consisting of an alpha (DRA) and a beta chain (DRB), 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. It is encoded by 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. Hundreds of DRB1 alleles have been described and some alleles have increased frequencies associated with certain diseases or conditions. For example, DRB1*1302 has been related to acute and chronic hepatitis B virus persistence. There are multiple pseudogenes of this gene.

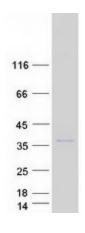
[provided by RefSeq, Jul 2020]

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

Product images:



Coomassie blue staining of purified HLA-DRB1 protein (Cat# TP318764). The protein was produced from HEK293T cells transfected with HLA-DRB1 cDNA clone (Cat# [RC218764]) using MegaTran 2.0 (Cat# [TT210002]).