

Product datasheet for **AR51405PU-N**

HLA class II DR beta 1 / HLA-DRB1 (30-227, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	HLA class II DR beta 1 / HLA-DRB1 (30-227, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH</u> <u>SSGLVPRGSH</u> <u>MGDTRPRFLW</u> QPKRECHFFN GTERVRFLLDR YFYNQEESVR FDSDVGEFRA VTELGRPDAE YWNSQKDILE QARAAVDTYC RHNYGVVESF TVQRRVQPKV TVYPSKTQPL QHHNLLVCSV SGFYPGSIEV RWFLNGQEEK AGMVSTGLIQ NGDWTFQTLV MLETVPRSGE VYTCQVEHPS VTSPLTVEWR ARSESAQSK
Tag:	His-tag
Predicted MW:	25.2 kDa
Concentration:	lot specific
Purity:	>85% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% Glycerol
Preparation:	Liquid purified protein
Protein Description:	Recombinant Human HLA-DRB1 protein, fused to <i>His-tag</i> at N-terminus, was expressed in E.coli.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_001230894</u>
Locus ID:	3123
UniProt ID:	<u>P04229</u> , <u>P01911</u> , <u>Q5Y7D1</u>
Cytogenetics:	6p21.32
Synonyms:	DRB1; HLA-DR1B; HLA-DRB; SS1



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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: