

## Recombinant Human HLA-DQB1

Cat. No. HLA-DQB1-27714TH Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant fragment of Human HLA DQw1 (aa 129-217) with a N terminal proprietary tag: predicted molecular weight 35.79 kDa.
<b>Species</b>	Human
<b>Source</b>	Wheat Germ
<b>ProteinLength</b>	89 amino acids
<b>Description</b>	<p>HLA-DQB1 belongs to the HLA class II beta chain paralogs. This class II molecule is a heterodimer consisting of an alpha (DQA) and a beta chain (DQB), 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 it contains six exons. Exon 1 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 DQ molecule both the alpha chain and the beta chain contain the polymorphisms specifying the peptide binding specificities, resulting in up to four different molecules. Typing for these polymorphisms is routinely done for bone marrow transplantation. Alternative splicing results in multiple transcript variants.</p>
<b>Molecular Weight</b>	35.790kDa inclusive of tags
<b>Form</b>	Liquid

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<b>Purity</b>	Proprietary Purification
<b>Storage buffer</b>	pH: 8.00 Constituents: 0.3% Glutathione, 0.79% Tris HCl
<b>Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
<b>Sequences of amino acids</b>	PTVTISPSRTEALNHHNLLVCSVTDFYPAQIKVRWFRNDQEETTGVVSTPLIRNGDW TFQILVMLEMTPQRGDVYTCHVEHPSLQNPII

## GENE INFORMATION

<b>Gene Name</b>	HLA-DQB1 major histocompatibility complex, class II, DQ beta 1 [ Homo sapiens ]
<b>Official Symbol</b>	HLA-DQB1
<b>Synonyms</b>	HLA-DQB1; major histocompatibility complex, class II, DQ beta 1; HLA DQB; HLA class II histocompatibility antigen, DQ beta 1 chain; CELIAC1; IDDM1;
<b>Gene ID</b>	3119
<b>mRNA Refseq</b>	NM_001243961
<b>Protein Refseq</b>	NP_001230890
<b>MIM</b>	604305
<b>Uniprot ID</b>	P01920
<b>Chromosome Location</b>	6p21.3

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**Pathway**

Adaptive Immune System, organism-specific biosystem; Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Antigen processing and presentation, organism-specific biosystem; Antigen processing and presentation, conserved biosystem;

**Function**

MHC class II receptor activity;

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