

Product datasheet for PH318764

HLA-DRB1 (NM_002124) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	HLA MS Standard C13 and N15-labeled recombinant protein (NP_002115)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC218764
Predicted MW:	29.97 kDa
Protein Sequence:	>RC218764 representing NM_002124 Red=Cloning site Green=Tags(s) MVCLKLPGGSCMTALTVTLMVLSSPLALAGDTRPRFLWQLKFECHFFNGTERVRLLERCIYNQEESVRFDS SDVGEYRAVTELRPDAEYWNSQKDLLEQRRAAVDTYCRHNYGVGESFTVQRRVEPKVTYVPSKTQPLQH HNLLVCSVSGFYPGSIEVRWFRNGQEEKAGVVSTGLIQNGDWFQTLVMLETVPRSGEVYTCQVEHPSVT SPLTVEWRARSESAQSKMLSGVGGFVLGLLFLGAGLFIYFRNQKGHSGLQPTGFLS TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_002115
RefSeq Size:	1182
RefSeq ORF:	798
Synonyms:	DRB1; HLA-DR1B; HLA-DRB; SS1
Locus ID:	3123
UniProt ID:	P04229 , P01911 , D7RIH8 , A0A224MM52 , X5DNQ0



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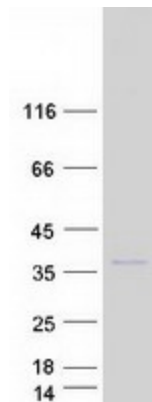
Cytogenetics: 6p21.32

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]).