HLA class II histocompatibility antigen, DRB1-1 beta chain (HLA-DRB1) Recombinant Protein | HLA-DRB1 recombinant protein

Recombinant Human HLA class II histocompatibility antigen, DRB1-1 beta chain (HLA-DRB1)

CATALOG #	HOST
AAA114968	**E Coli or Yeast or Baculovirus or Mammalian Cell**

PRODUCT SYNONYMS

HLA class II histocompatibility antigen; DRB1-1 beta chain (HLA-DRB1); Recombinant Human HLA class II histocompatibility antigen; DRB1-1 beta chain; MHC class II antigen DRB1*1; DR-1; DR1; HLA-DRB1 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	30-227aa; Extracellular Domain
Sequence	GDTRPRFLWQ LKFECHFFNG TERVRLLERC IYNQEESVRF DSDVGEYRAV TELGRPDAEY WNSQKDLLEQ RRAAVDTYCR HNYGVGESFT VQRRVEPKVT VYPSKTQPLQ HHNLLVCSVS GFYPGSIEVR WFRNGQEEKA GVVSTGLIQN GDWTFQTLVM LETVPRSGEV YTCQVEHPSV TSPLTVEWRA RSESAQSK
Sequence Length	227
Species	Homo sapiens (Human)
Production Note	**Special Offer:** The E Coli host-expressed protein is manufactured from a stock plasmid containing the protein gene. E Colihost-expressed protein is stocked in different unit sizes ranging from as small as 10 ug to as large as 1 mg. Bulk inventory is also available. The E Coli host-expressed protein has been ordered over and over again by researchers and has stood the test of time as both a robust protein and important target for the research community. It is part of our new program to make our most popular protein targets and corresponding hosts available in expanded unit sizes and with a quick processing time. Select E Coli host-expressed protein for the fastest delivery among all hosts. Please contact our **or email to** for more details.
Preparation and Storage	Store at -20 degrees C. For long-term storage, store at -20 degrees C or -80 degrees C. Store working aliquots at 4 degrees C for up to one week. Repeated freezing and thawing is not recommended.

IMAGES

SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for HLA-DRB1 recombinant protein	Binds peptides derived from antigens that access the endocytic route of antigen presenting cells (APC) and presents them on the cell surface for recognition by the CD4 T-cells. The peptide binding cleft accommodates peptides of 10-30 residues. The peptides presented by MHC class II molecules are generated mostly by degradation of proteins that access the endocytic route; where they are processed by lysosomal proteases and other hydrolases. Exogenous antigens that have been endocytosed by the APC are thus readily available for presentation via MHC II molecules; and for this reason this antigen presentation pathway is usually referred to as exogenous. As membrane proteins on their way to degradation in lysosomes as part of their normal turn-over are also contained in the endosomal/lysosomal compartments; exogenous antigens must compete with those derived from endogenous components. Autophagy is also a source of endogenous peptides; autophagosomes constitutively fuse with MHC class II loading compartments. In addition to APCs; other cells of the gastrointestinal tract; such as epithelial cells; express MHC class II molecules and CD74 and act as APCs; which is an unusual trait of the GI tract. To produce a MHC class II molecule that presents an antigen; three MHC class II molecules (heterodimers of an alpha and a beta chain) associate with a CD74 trimer in the ER to form a heterononamer. Soon after the entry of this complex into the endosomal/lysosomal system where antigen processing occurs; CD74 undergoes a sequential degradation by various proteases; including CTSS and CTSL; leaving a small fragment termed CLIP (class-II-associated invariant chain peptide). The removal of CLIP is facilitated by HLA-DM via direct binding to the alpha-beta-CLIP complex so that CLIP is released. HLA-DM stabilizes MHC class II molecules until primary high affinity antigenic peptides are bound. The MHC II molecule bound to a peptide is then transported to the cell membrane surface. In B-cells; the interaction between HLA-DM and MHC class II molecules is regulated by HLA-DO. Primary dendritic cells (DCs) also to express HLA-DO. Lysosomal microenvironment has been implicated in the regulation of antigen loading into MHC II molecules; increased acidification produces increased proteolysis and efficient peptide loading. (Microbial infection) Acts as a receptor for Epstein-Barr virus on lymphocytes.
Product Categories/Family for HLA-DRB1 recombinant protein	Immunology

NCBI AND UNIPROT INFORMATION

NCBI GI #	34395916
NCBI GeneID	3123
UniProt Accession #	P04229; O62869; P13758; Q06662; Q30116; Q30117; Q5Y7E9; Q7M2H4; Q95461; Q9BCL7; A4F5N0; A8K098; P01911; P01912; P20039; Q29974; Q30134; Q30167; Q5Y7A7; Q95IE3; Q9GIY3
Molecular Weight	42.9 kDa
NCBI Official Full Name	HLA class II histocompatibility antigen, DRB1-1 beta chain
NCBI Official Synonym Full Names	major histocompatibility complex, class II, DR beta 1
NCBI Official Symbol	HLA-DRB1
NCBI Official Synonym Symbols	SS1; DRB1; DRw10; HLA-DRB; HLA-DR1B
NCBI Protein Information	major histocompatibility complex, class II, DR beta 1; DW2.2/DR2.2; MHC class II antigen; lymphocyte antigen DRB1; MHC class II HLA-DRw10-beta; human leucocyte antigen DRB1; MHC class II HLA-DR beta 1 chain; MHC class II HLA-DR-beta cell surface glycoprotein; HLA class II histocompatibility antigen, DR-1 beta chain
UniProt Protein Name	HLA class II histocompatibility antigen, DRB1-1 beta chain
UniProt Gene Name	**HLA-DRB1**
UniProt Synonym Gene Names	DR-1; DR1
UniProt Entry Name	2B11_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://stage.aaabiotech.com/hla-drb1-recombinant-protein-e-coli-or-yeast-or-baculovirus-or-mammalian-cell/114968