

Rabbit Anti-HLA-DQA1 antibody

SL17542R

Product Name:	HLA-DQA1
Chinese Name:	组织相容性抗原DQA1抗体
Alias:	CD; CELIAC1; DC 1 alpha chain; DC alpha; DC-1 alpha chain; DC-alpha; DC1, included; DQ alpha 1 chain; DQ-A1; DQ-DRW9 alpha chain; DQA1_HUMAN; FLJ27088; FLJ27328; Gluten-sensitive enteropathy (celiac disease); GSE; HLA class II histocompatibility antigen, DQ alpha 1 chain; HLA class II histocompatibility antigen, DQ(W3) alpha chain; HLA-DCA; HLA-DQA; HLA-DQA1; HLA-DQA1 major histocompatibility complex, class II, DQ alpha 1; HLADC histocompatibility type; Immune response antigens HIa, included; leucocyte antigen DQA1; leukocyte antigen alpha chain; Major histocompatibility complex, class II, DQ alpha 1; MGC149527; MHC class II antigen; MHC class II DQA1; MHC class II HLA-D alpha glycoprotein; MHC class II HLA-DQ alpha 1; MHC class II surface glycoprotein; MHC HLA-DQ alpha; OTTHUMP0000029141; OTTHUMP00000176885; OTTHUMP00000178551; OTTHUMP00000178552; OTTHUMP00000233817.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	26kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HLA-DQA1:151-254/254
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage:

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:

PubMed

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 accomodates 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 an 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 miroenvironment has been implicated in the regulation of antigen loading into MHC II

Product Detail:

Subcellular Location:

Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus > trans-Golgi network membrane. Endosome membrane. Lysosome membrane. The MHC class II complex transits through a number of intracellular compartments in the endocytic pathway until it reaches the cell membrane for antigen presentation.

molecules, increased acidification produces increased proteolysis and efficient peptide

Similarity:

loading.

Belongs to the MHC class II family.

Contains 1 Ig-like C1-type (immunoglobulin-like) domain.

SWISS:

P01909

Gene ID:

3117

Database links:

Entrez Gene: 100133678 Human

Entrez Gene: 100507686 Human

Entrez Gene: 100509457 Human

Entrez Gene: 3117 Human

Omim: 146880 Human

SwissProt: P01909 Human

Unigene: 387679 Human

Unigene: 591798 Human

Unigene: 706240 Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.