

Recombinant Human HLA-DR protein ab177661

1 图像

描述	
产品名称	重组人HLA-DR蛋白
纯度	> 90 % SDS-PAGE.
表达系统	Escherichia coli
Accession	<b><u>P01903</u></b>
蛋白长度	Protein fragment
无动物成分	No
性质	Recombinant
种属	Human
序列	MGSSHHHHHH SSGLVPRGSH MIKEEHVIIQ AEFYLNPDQS GEFMFDFDGD EIFHVDMAKK ETVWRLEEFGRFASFEAQGANLANIAVDKAN LEIMTKRSNYPITNVPPEVTVLTNSPVEL REPVLICFI DKFTPPVVNV TWLRNGKPV TGVSETVFLPREDHLFRKFHYLPFLPSTED VYDCRVEHWGLDEPLLKHWEFDAPSPLPET TE
预测分子量	24 kDa including tags
氨基酸	26 to 216
标签	His tag N-Terminus
额外的序列信息	Extracellular domain. (NCBI Accession No.: NP_061984)

技术指标	
Our <b>Abpromise guarantee</b> covers the use of <b>ab177661</b> in the following tested applications.	
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.	
应用	Mass Spectrometry
	SDS-PAGE
质谱法	MALDI-TOF
形式	Liquid

## 稳定性和存储

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.32% Tris HCl, 0.88% Sodium chloride, 10% Glycerol, 0.02% DTT

## 常规信息

### 功能

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 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 microenvironment has been implicated in the regulation of antigen loading into MHC II molecules, increased acidification produces increased proteolysis and efficient peptide loading.

### 序列相似性

Belongs to the MHC class II family.

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

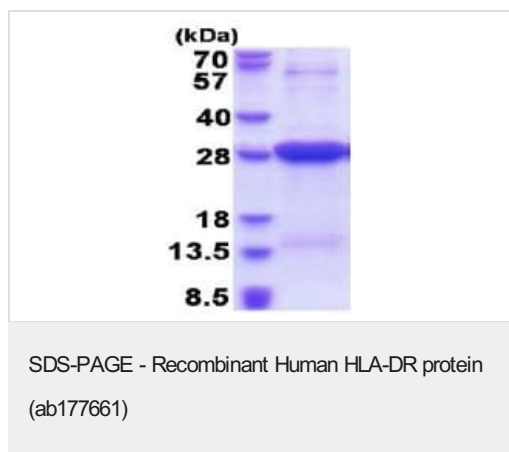
### 翻译后修饰

Ubiquitinated by MARCH1 or MARCH8 at Lys-244 leading to down-regulation of MHC class II. When associated with ubiquitination of the beta subunit of HLA-DR: HLA-DRB4 'Lys-254', the down-regulation of MHC class II may be highly effective.

### 细胞定位

Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus > trans-Golgi network membrane. Endosome membrane. Lysosome membrane. Late endosome 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.

## 图片



15% SDS-PAGE analysis of ab177661 (3 µg)

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