

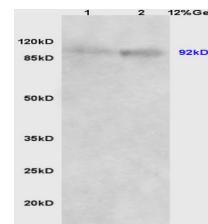
## Product Datasheet

### HLA-DPB1 Polyclonal Antibody GRP538

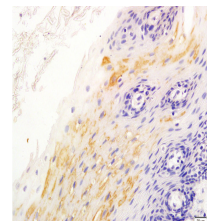
**Description**

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.

<b>Species/Host</b>	Rabbit
<b>Reactivity</b>	Human
<b>Conjugation</b>	Unconjugated
<b>Tested Applications</b>	FC, IHC-P, WB
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human DPB1 (public_immunogen_range: 100-150/258)
<b>Form/Appearance</b>	Aqueous buffered solution containing 1% BSA, 50% glycerol and 0.09% sodium azide.
<b>Concentration</b>	1ug/ul
<b>Storage</b>	Store at -20°C for 12 months.
<b>Note</b>	For research use only.
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Purified by Protein A.
<b>Uniprot ID</b>	<b>P04440</b>
<b>Entrez</b>	<b>3115</b>
<b>Dilution Range</b>	WB: 1:300-1000, FC: 1:20-100, IHC-P: 1:200-400



WB of GRP538



IHC-P of GRP538