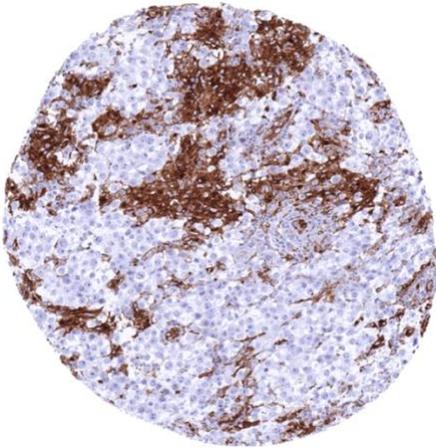


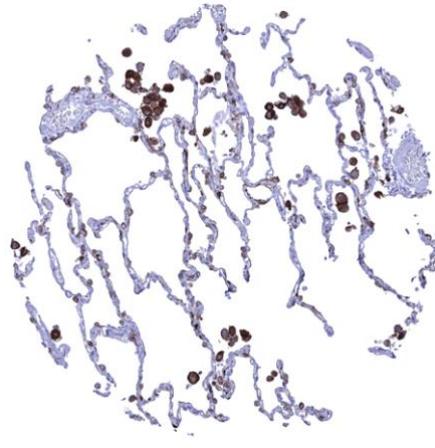
## Anti- HLA-DRB1 Antibody MSVA-478R / Recombinant Rabbit monoclonal

|                    |  |
|--------------------|--|
| Human SwissProt    | P01911   |
| Human Gene Symbol  | HLA-DRB1   |
| Synonyms           | DRB1; HLA class II histocompatibility antigen, DR-1 beta chain; HLA-DR-beta 1; HLA-DRB1; human leucocyte antigen DRB1; Leucocyte antigen DR beta 1 chain; lymphocyte antigen DRB1; major histocompatibility complex, class II, DR beta 1; MHC class II HLA-DR beta 1 chain; MHC class II HLA-DR-beta cell surface glycoprotein |
| Specificity        | HLA-DRB1   |
| Immunogen          | Recombinant human HLA-DRB1 fragment  |
| Isotype            | Rabbit / IgG   |
| Species Reactivity | Human  |

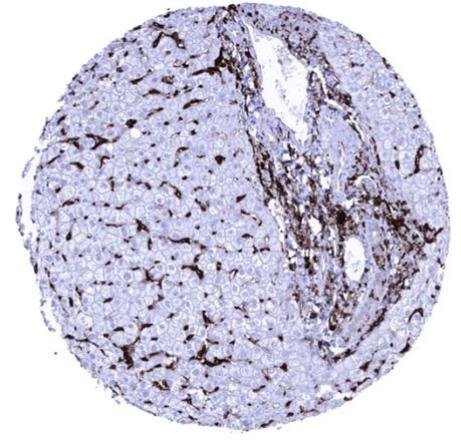
|                     |   |
|---------------------|---|
| Localization        | Cell Surface  |
| Storage & Stability | Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.          |
| Supplied As         | 200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA                   |
| Positive Control    | Liver: An at least moderate staining should be seen of sinusoids and Kupffer cells. Kidney: An at least moderate staining should be seen in glomerular capillaries. |
| Negative Control    | Liver, kidney: HLA-DR staining must be absent normal in hepatocytes and in tubuli of completely normal kidney.  |



HLA-DRB1 negative seminoma showing strong staining of inflammatory cells.



Alveolar macrophages exhibiting strong HLA-DRB1 staining.



Intense HLA-DRB1 staining of inflammatory cells and of Kupffer cells in the liver.

### Biology

HLA- represents the most prevalent of 4 different beta subunits (DRB1, DRB3, DRB4, DRB5) of the HLA-DR protein complex. HLA-DRB1 is expressed in all humans and its expression level is at least 5 times higher than what is seen for other HLA-DR  $\beta$ -subunits. Together with the HLA-DR  $\alpha$ -subunit, the DR  $\beta$ -subunits form the HLA-DR complex which represents an  $\alpha\beta$  heterodimer protein. HLA-DR is an MHC class II cell surface receptor acting as a ligand for the T-cell receptor. The HLA-DR cell surface receptor is constitutively expressed in professional antigen-presenting cells (B lymphocytes, dendritic cells, macrophages) but can also be temporarily expressed in non-professional antigen-presenting cells. HLA-DR has a pivotal role in the immune system by presenting peptides derived from extracellular proteins to T helper cells. In normal tissues, HLA-DRB1 immunostaining is regularly seen on the majority of inflammatory cells including B-lymphocytes, dendritic cells and macrophages. In these cells the staining is mostly strong but may show variability. HLA-DRB1 staining is also seen in endothelial cells of blood vessels. HLA-DRB1 staining of epithelial cells predominantly occurs in the small intestine. Cytoplasmic and membranous HLA-DRB1 staining can, however, occur in virtually all epithelial cell types in case of inflammation, atrophy or regeneration. In cancer, HLA-DRB1 immunostaining of tumor cells and of associated inflammatory cells occurs at variable frequency.

### Potential Research Applications

-HLA-DR expression is of critical interest in immuno-oncology research.

### Protocol Suggestions

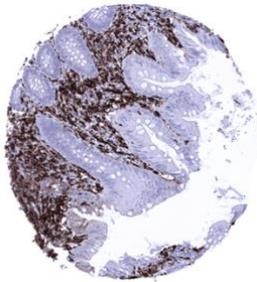
**Dilution: 1:150. pH 7,8 is optimal.** Freshly cut sections should be used (more than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

### Limitations

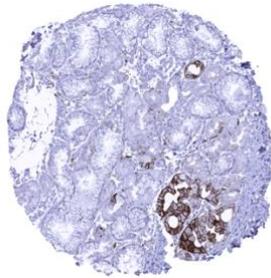
This antibody is available for **research use only** and is not approved for use in diagnostics.

### Warranty

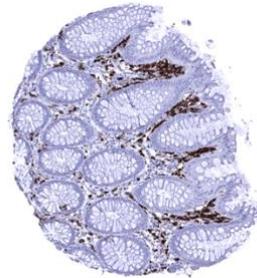
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



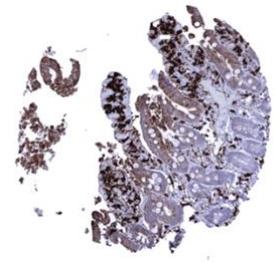
Appendix, mucosa - Strong HLA-DRB1 staining of mucosal inflammatory cells. Superficial epithelial cells also show a weak focal positivity



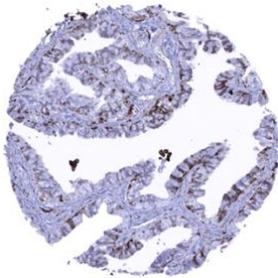
Bronchus, glands - Strong membranous HLA-DRB1 staining in a group of glandular epithelial cells



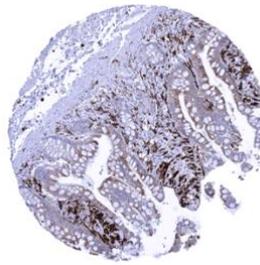
Colon descendens, mucosa - Strong HLA-DRB1 staining of mucosal inflammatory cells



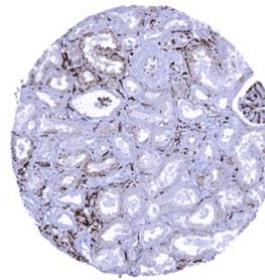
Duodenum, mucosa - Intense HLA-DRB1 staining of macrophages and possibly other inflammatory cells. Superficial epithelial cells also exhibit a positive staining



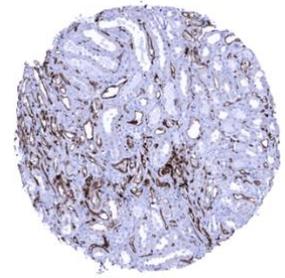
Fallopian tube, mucosa - HLA-DRB1 staining in a fraction of epithelial cells and in few inflammatory cells in this sample



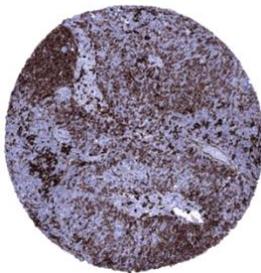
Ileum, mucosa - Intense HLA-DRB1 staining of macrophages and possibly other inflammatory cells. Superficial epithelial cells also exhibit a positive staining



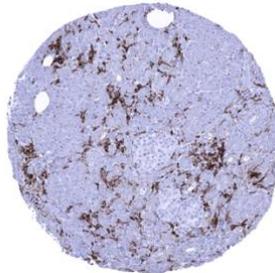
Kidney, cortex - In the inflamed kidney, HLA-DRB1 staining is seen in endothelial cells, inflammatory cells and in tubulus cells adjacent to inflammation



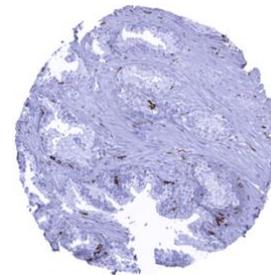
Kidney, medulla - Intense HLA-DRB1 staining in endothelial cells in this sample



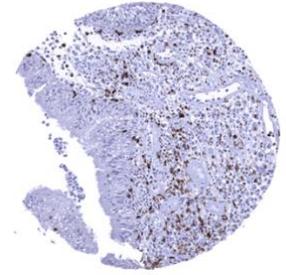
Lymph node - HLA-DRB1 staining macrophages, dendritic cells and B-lymphocytes. Some endothelial cells also stain positive



Pancreas - Strong HLA-DRB1 staining of inflammatory cells. Few acinar epithelial cells also show a weak focal positivity



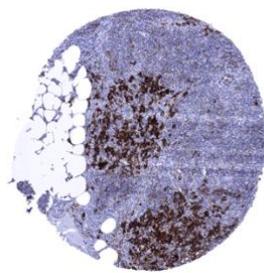
Prostate - HLA-DRB1 staining in scattered inflammatory cells



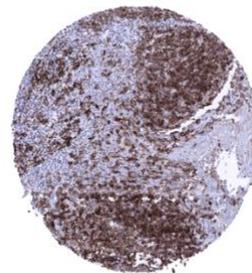
Sinus paranasales - HLA-DRB1 staining in scattered inflammatory cells



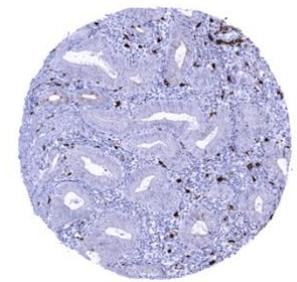
Spleen - HLA-DRB1 staining of lymphocytes and macrophages



Thymus - HLA-DRB1 staining of a subset of cells. Most thymocytes remain negative



Tonsil - HLA-DRB1 staining of a large fraction of lymphocytes



Uterus, endometrium (proliferation) - HLA-DRB1 staining in scattered inflammatory cells and - focally - in some epithelial cells