

# HLA-B (MHC Class I) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone EP-4 ] Catalog # AH11417

#### **Product Information**

Application	IF, FC
Primary Accession	<u>P03989</u>
Other Accession	<u>3106, 77961</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgM, kappa
Clone Names	EP-4
Calculated MW	30 KDa

#### **Additional Information**

Other Names	HLA class I histocompatibility antigen, B-27 alpha chain, MHC class I antigen B*27, HLA-B, HLAB
Application Note	IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	HLA-B (MHC Class I) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

### Background

This MAb recognizes the HLA-B27 cell surface antigen on human cells. It may be used to HLA type human lymphocytes. Approximately 60% of patients with ankylosing spondylitis are HLA-B27 positive. This reagent can be used to help identify this HLA haplotype in human lymphocytes. Major histocompatibility complex (MHC) molecules form an integral part of the immune response system. They are cell-surface receptors that bind pep- tides and present them to T lymphocytes. Human leukocyte antigens (HLAs) are polymorphic members of the MHC family that are specifically involved in the presentation of antigens to the T cell receptor. There are two classes of HLA antigens: class I (HLA-A, HLA-B and HLA-C) and class II (HLA-D). Class I molecules are expressed in nearly all cells and play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum. The differential structural properties of MHC class I and class II molecules account for their respective roles in activating different populations of T lymphocytes. HLA-B encodes a membrane anchored heavy chain, which hetero-dimerizes with a light chain (  $\Box$  E-2-Microglobulin) to form MHC-I. Polymorphisms yield hundreds of HLA-B alleles. The HLA-B27 allele appears with increased frequency in uveitis patients.

## References

El-Shabrawi, Y., et al. 2006. Polymorphisms within the tumor necrosis factor α promoter region in patients with HLA-B27-associated uveitis: association with susceptibility and clinical manifestations. Ophthalmology 113: 695-700. Hansen JA et al The HLA system in clinical marrow transplantation. Hematol Oncol Clin North Am 1990, 4(3):507-515

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.