10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Mouse Monoclonal Antibody [Clone SPM420]
Catalog # AH11415

Product Information

Application	IF, FC
Primary Accession	P03989
Other Accession	3106, 77961
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG3, kappa
Clone Names	SPM420
Calculated MW	45 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

HLA-B belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. Class I molecules play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45kDa and its gene contains 8 exons. Exon 1 encodes the leader peptide, exon 2 and 3 encode the alpha1 and alpha2 domains, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region and exons 6 and 7 encode the cytoplasmic tail. Polymorphisms within exon 2 and exon 3 are responsible for the peptide binding specificity of each class one molecule. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. Hundreds of HLA-B alleles have been described.

References

Young NT et al. Killer cell inhibitory receptor interactions with HLA class I molecules: implications for alloreactivity and transplantation. Hum Immunol 1997, 52(1):1-11 | Krensky AM et al Immunomodulation by HLA class I-derived peptides. Transplant Proc 1996, 28(6):3026-8 | 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'.