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HLA-B Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM2114b

Product Information

Application	WB, E
Primary Accession	P03989
Other Accession	P30490, P30488, P30487, P30486, P30485, P30483, P30481, P30479, Q04826, P18463, P30464, P30461, NP_005505.2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgM
Clone Names	528CT10.4.1
Antigen Region	62-90

Additional Information

Other Names	HLA class I histocompatibility antigen, B-27 alpha chain, MHC class I antigen B*27, HLA-B, HLAB
Target/Specificity	This HLA-B antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 62-90 amino acids from human HLA-B.
Dilution	WB~~1:500~1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HLA-B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

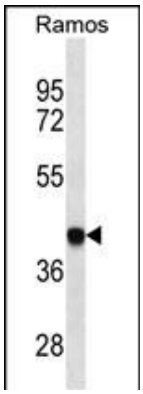
HLA-B belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. Class I molecules play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa 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

Parsons, M.S., et al. J. Infect. Dis. 202 SUPPL 3, S356-S360 (2010) :
Brockman, M.A., et al. J. Virol. 84(22):11937-11949(2010)
Noble, J.A., et al. Diabetes 59(11):2972-2979(2010)
Lipponen, K., et al. Diabetes (2010) In press :
Liao, Y.Q., et al. Zhongguo Shi Yan Xue Ye Xue Za Zhi 18(4):1055-1058(2010)

Images



HLA-B Antibody(Cat. #AM2114b) western blot analysis in Ramos cell line lysates (35µg/lane).This demonstrates the HLA-B antibody detected the HLA-B protein (arrow).