

Product Name: HLA-B Mouse Monoclonal Antibody**Catalog #: AMM81771**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC,ELISA,FC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	40.5kDa

Antigen Information

Gene Name	HLA-B
Alternative Names	AS; HLAB; Bw-47; Bw-50; SPDA1; B-4901; B-5001; HLA-Cw;
Gene ID	3106.0
SwissProt ID	P01889
Immunogen	Purified recombinant fragment of human HLA-B (AA: 241-362) expressed in E. Coli.

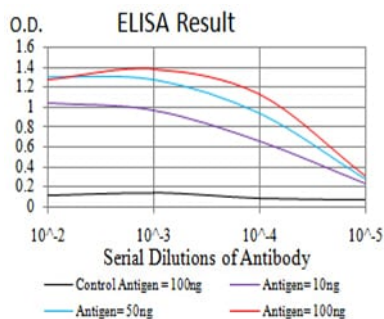
Background

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.

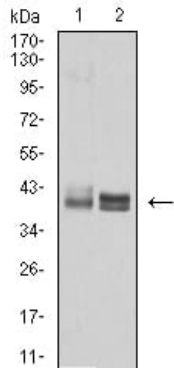
The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon 1 encodes the leader peptide, exon 2 and 3 encode the alpha1 and alpha2 domains, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region and exons 6 and 7 encode the cytoplasmic 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.

Research Area

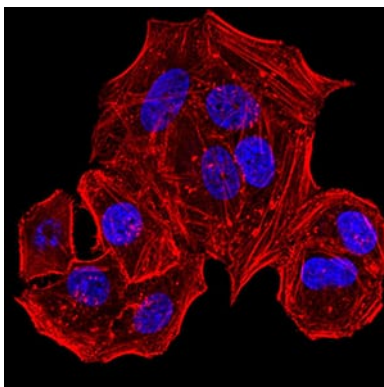
Image Data



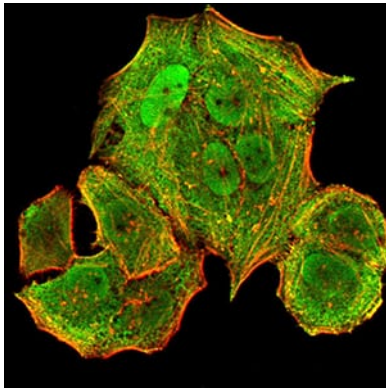
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



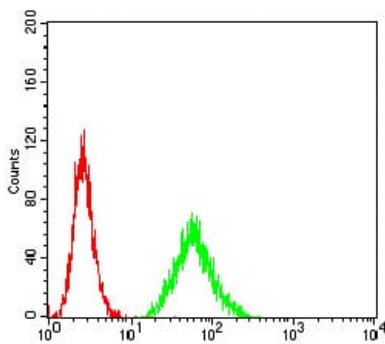
Western blot analysis using HLA-B mouse mAb against Ramos (1) and A431 (2) cell lysate.



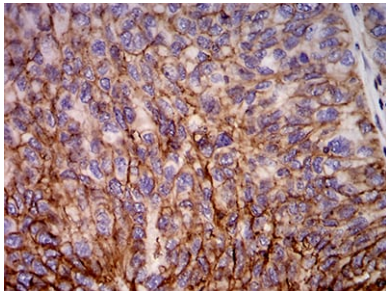
Immunofluorescence analysis of HeLa cells using HLA-B mouse mAb. Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



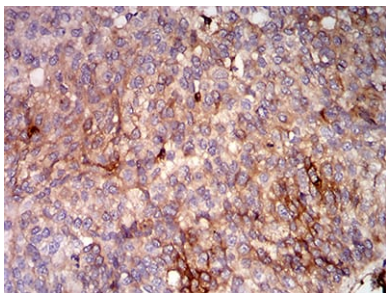
Immunofluorescence analysis of HeLa cells using HLA-B mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



Flow cytometric analysis of MCF-7 cells using HLA-B mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human ovarian cancer tissues using HLA-B mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human bladder cancer tissues using HLA-B mouse mAb with DAB staining.