

## HLA-C Monoclonal Antibody

### Description

<b>Product type</b>	Antibody
<b>Code</b>	BT-MCA3963
<b>Host</b>	Mouse
<b>Isotype</b>	Mouse IgG1
<b>Size</b>	100µL, 50µL
<b>Immunogen</b>	Purified recombinant fragment of human HLA-C (AA: 25-308) expressed in E. Coli.
<b>Mol wt</b>	40.6kDa
<b>Species reactivity</b>	Others
<b>Clonality</b>	Monoclonal
<b>Recommended application</b>	IHC,ICC,FCM
<b>Concentration</b>	N/A
<b>Full name</b>	N/A
<b>Synonyms</b>	MHC;HLAC;HLC-C;D6S204;PSORS1;HLA-JY3

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

### Background

HLA-C 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 endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the alpha1 and alpha2 domain, 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. About 6000 HLA-C alleles have been described. The HLA system plays an important role in the occurrence and outcome of infectious diseases, including those caused by the malaria parasite, the human immunodeficiency virus (HIV), and the severe acute respiratory syndrome coronavirus (SARS-CoV). The structural spike and the nucleocapsid proteins of the novel coronavirus SARS-CoV-2, which causes coronavirus disease 2019 (COVID-19), are reported to contain multiple Class I epitopes with predicted HLA restrictions. Individual HLA genetic variation may help explain different immune responses to a virus across a population.

### Recommended Dilution

WB: 1:500 - 1:2000

IHC-p: 1:200 - 1:1000

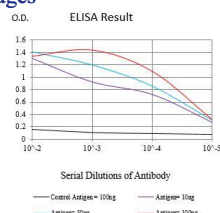
ICC: 1:50 - 1:200

FCM: 1:200 - 1:400

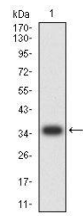
ELISA: 1:10000

Not yet tested in other applications.

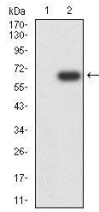
### Images



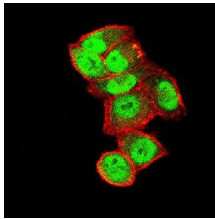
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



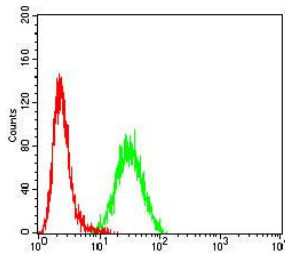
Western blot analysis using HLA-C mAb against human HLA-C (AA: 25-308) recombinant protein.  
(Expected MW is 35.4 kDa)



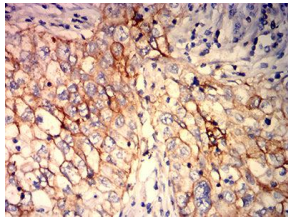
Western blot analysis using HLA-C mAb against HEK293-6e (1) and HLA-C (AA: 25-308)-hIgGFc transfected HEK293-6e (2) cell lysate.



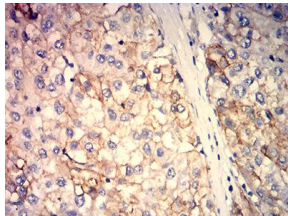
Immunofluorescence analysis of HeLa cells using HLA-C mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)



Flow cytometric analysis of THP-1 cells using HLA-C mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded lung cancer tissues using HLA-C mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded liver cancer tissues using HLA-C mouse mAb with DAB staining.

### Storage

Store at 4°C short term. Aliquot and store at -20°C long term.

501 Changsheng S Rd, Nanhu Dist, Jiaxing, Zhejiang, China

Tel: 86 21 31007137 | E-mail: [save@bt-laboratory.com](mailto:save@bt-laboratory.com) | [www.bt-laboratory.com](http://www.bt-laboratory.com)