

HLA-C RABBIT PAB

Cat.#: S221975

Product Name: Anti-HLA-C Rabbit Polyclonal Antibody

Synonyms: MHC; HLAC; HLC-C; D6S204; PSORS1; HLA-JY3

UNIPROT ID: P10321 (Gene Accession - NP_002108)

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.

Immunogen: Synthetic peptide of human HLA-C

Applications: ELISA, IHC

Recommended Dilutions: IHC: 50-200; ELISA: 5000-10000

Host Species: Rabbit

Clonality: Rabbit Polyclonal

Isotype: Immunogen-specific rabbit IgG

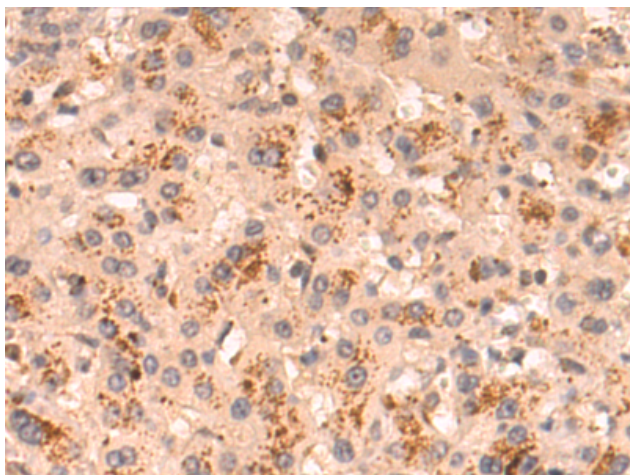
Purification: Antigen affinity purification

Species Reactivity: Human

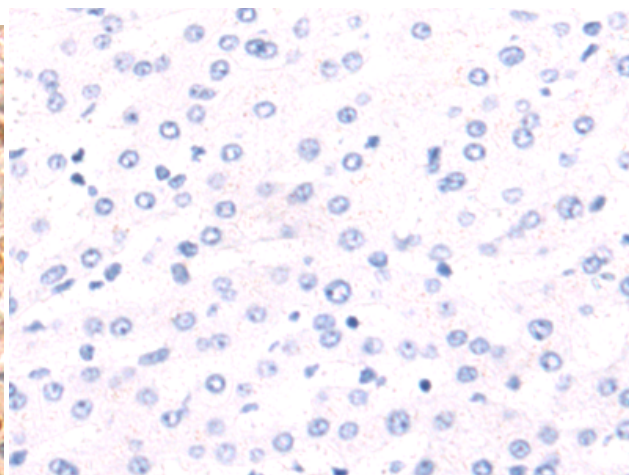
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

Research Areas: Immunology

Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



Immunohistochemistry analysis of paraffin embedded Human liver cancer tissue using 221975(HLA-C Antibody) at a dilution of 1/50(Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human liver cancer tissue is first treated with the synthetic peptide and then with 221975(Anti-HLA-C Antibody) at dilution 1/50.