

HLA-C Rabbit pAb

Catalog No.: A1013 **3 Publications**

Basic Information

Observed MW

41kDa

Calculated MW

41kDa

Category

Primary antibody

Applications

ELISA, WB, IF/ICC

Cross-Reactivity

Human, Mouse

Recommended Dilutions

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

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 Information

Gene ID	Swiss Prot
3107	P10321

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 25-308 of human HLA-C (P30499).

Synonyms

MHC; HLAC; HLC-C; D6S204; PSOR51; HLA-JY3; HLA-C

Contact

 | www.abclonal.com

Product Information

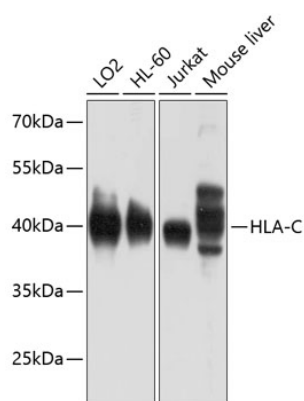
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of extracts of various cell lines, using HLA-C antibody (A1013) at 1:1000 dilution.

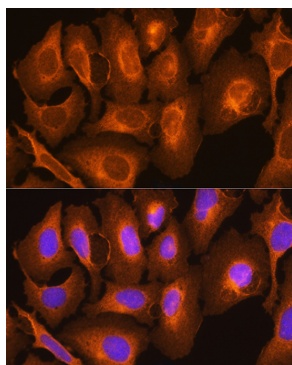
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (A5014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 10s.



Immunofluorescence analysis of U2OS cells using HLA-C antibody (A1013) at dilution of 1:100. Blue: DAPI for nuclear staining.