

HLA-A Rabbit mAb

Catalog No.: A29308 **Recombinant**

Basic Information

Observed MW

41 kDa

Calculated MW

41 kDa

Category

Primary antibody

Applications

WB,IP,IF/ICC,IHC-P,ELISA

Cross-Reactivity

Human

CloneNo number

ARC3982

Background

HLA-A 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 so that they can be recognized by cytotoxic T cells. 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, exons 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. More than 6000 HLA-A 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 Dilutions

WB 1:40000 - 1:200000**IP** 0.5 µg - 4 µg antibody for
200 µg - 400 µg extracts of
whole cells**IF/ICC** 1:100 - 1:400**IHC-P** 1:1000 - 1:4000**ELISA** Recommended starting
concentration is 1 µg/mL.
Please optimize the
concentration based on your
specific assay requirements.
For high-ratio antibody
dilutions (≥1:10000) a
sequential dilution method
is strongly recommended to
ensure measurement
accuracy.

Immunogen Information

Gene ID

3105

Swiss Prot

P04439/P30443

Immunogen

This information is considered to be commercially sensitive.

Synonyms

HLAA

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

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

Buffer: PBS with 0.09% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

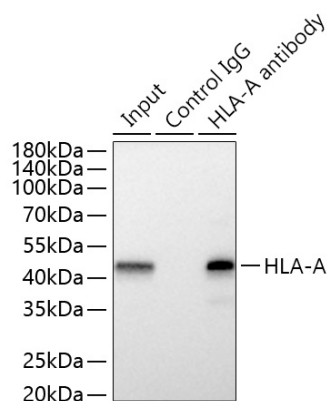
Contact

☎ | 400-999-6126

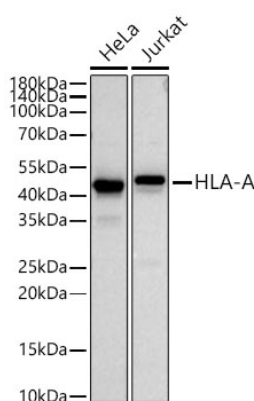
✉ | cn.market@abclonal.com.cn

🌐 | www.abclonal.com.cn

Validation Data



Immunoprecipitation of HLA-A from 300 µg extracts of HeLa cells was performed using 2 µg of HLA-A Rabbit mAb (A29308). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using HLA-A Rabbit mAb (A29308) at a dilution of 1:20000.



Western blot analysis of various lysates using HLA-A Rabbit mAb (A29308) at 1:100000 dilution incubated overnight at 4°C.

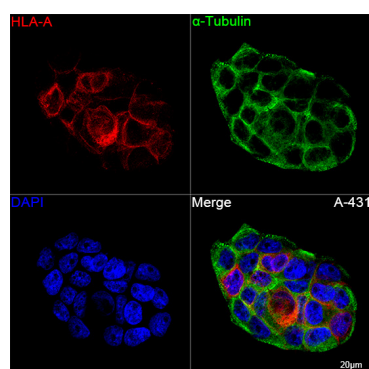
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

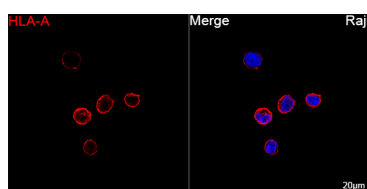
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

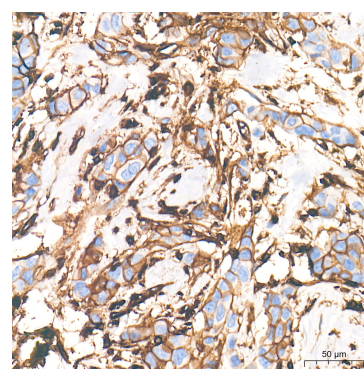
Exposure time: 5 s.



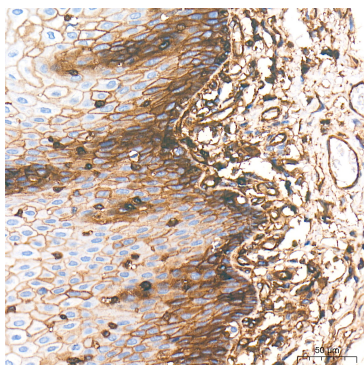
Confocal imaging of A-431 cells using HLA-A Rabbit mAb (A29308, dilution 1:400) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



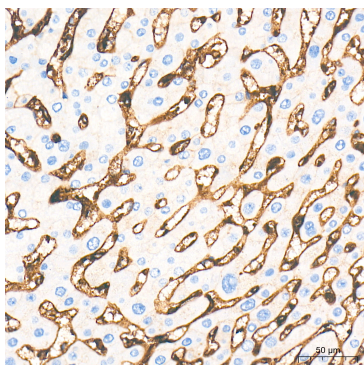
Confocal imaging of Raji cells using HLA-A Rabbit mAb (A29308, dilution 1:400) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using HLA-A Rabbit mAb (A29308) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human esophagus tissue using HLA-A Rabbit mAb (A29308) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human liver tissue using HLA-A Rabbit mAb (A29308) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using HLA-A Rabbit mAb (A29308) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.