

AP52054PU-N

Polyclonal Antibody to HLA-DQA1 (N-term) - Aff - Purified

Alternate names:

DQ alpha 1 chain, HLA class II histocompatibility antigen

Quantity:

0.4 ml

Concentration:

lot specific

Background:

HLA-DQA1 belongs to the HLA class II alpha chain paralogues. The class II molecule is a heterodimer consisting of an alpha (DQA) and a beta chain (DQB), both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. Class II molecules are expressed in antigen presenting cells (APC: B Lymphocytes, dendritic cells, macrophages). The alpha chain is approximately 33-35 kDa. It is encoded by 5 exons; exon 1 encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, and exon 4 encodes the transmembrane domain and the cytoplasmic tail. Within the DQ molecule both the alpha chain and the beta chain contain the polymorphisms specifying the peptide binding specificities, resulting in up to four different molecules. Typing for these polymorphisms is routinely done for bone marrow transplantation.

Uniprot ID:

[P01908](#)

NCBI:

[9606](#)

Host / Isotype:

Rabbit / Ig

Immunogen:

KLH conjugated synthetic peptide between 46-74 amino acids from the N-terminal region of human HLA-DQA1

Format:

State: Liquid purified Ig fraction

Purification: Protein A column, followed by peptide affinity purification

Buffer System: PBS containing 0.09% (W/V) Sodium Azide as preservative

Applications:

ELISA: 1/1000.

Western Blot: 1/100-1/500.

Flow Cytometry: 1/10-1/50.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody recognizes Human HLA-DQA1 (N-term).

Add. Information:

Molecular Weight: 27805 Da

Storage:

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

Donaldson, P.T., et al. J. Hepatol. 53(6):1049-1053(2010)

Noble, J.A., et al. Diabetes 59(11):2972-2979(2010)

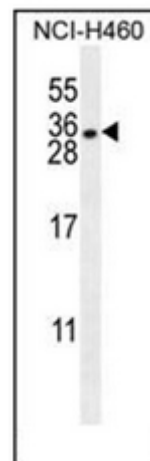
Ferreira, R.C., et al. Nat. Genet. 42(9):777-780(2010)

Ovsyannikova, I.G., et al. PLoS ONE 5 (7), E11806 (2010)

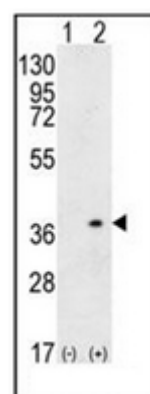
Xun, Y.H., et al. Zhonghua Shi Yan He Lin Chuang Bing Du Xue Za Zhi 23(6):430-433(2009)

Pictures:

Western blot analysis of HLA-DQA1 Antibody (N-term) Cat.-No AP52054PU-N in NCI-H460 cell line lysates (35ug/lane). This demonstrates the HLA-DQA1 antibody detected the HLA-DQA1 protein (arrow).



Western blot analysis of HLA-DQA1 (arrow) using HLA-DQA1 Antibody (N-term) Cat.-No AP52054PU-N. 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the HLA-DQA1 gene.



Flow cytometric analysis of NCI-H460 cells using HLA-DQA1 Antibody (N-term) Cat.-No AP52054PU-N (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

