

Product Data Sheet

PE anti-human HLA-DQ

Catalog # / Size: 318105 / 25 tests
318106 / 100 tests

Clone: HLADQ1

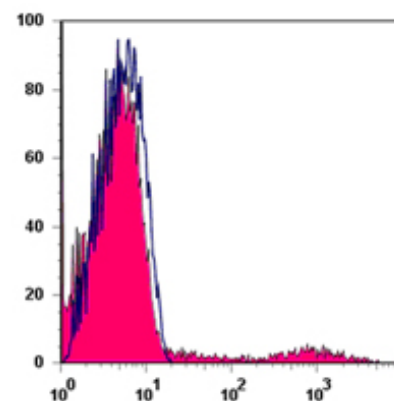
Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with HLADQ1 PE and overlaid with isotype control

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 μ l to 5 μ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 μ l staining volume or per 100 μ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

Application Notes: The antibody HLADQ1 reacts with HLA-DQ 4,5,6,7,8,9 but does not react with DQ2, DR or DP. Additional reported (for the relevant formats) applications include: immunohistochemical staining of acetone-fixed frozen sections and formalin-fixed paraffin-embedded tissues.

Application References: 1. Knapp W, *et al.* 1989. Leukocyte Typing IV. Oxford University Press. New York.
2. Pazmandi K, *et al.* 2012. *PLoS One.* 7:e52085. PubMed.

Description: HLA-DQ is also known as MHC class II DQ monomorphic antigen. The major histocompatibility complex is composed of two heterodimeric glycoproteins (α and β chains) with apparent molecular weights of 27 and 32 kD. In contrast to other MHC class II molecules, both polypeptide chains of HLA-DQ are polymorphic, with the α chain showing an extremely high degree of polymorphism. HLA-DQ is expressed on B cells in the peripheral blood, and weakly expressed on activated T cells and some monocytes. HLA-DQ is absent on hematopoietic progenitors, resting T cells, erythrocytes, and platelets. HLA-DQ is expressed after HLA-DR and HLA-DP in hematopoietic development. HLA-DQ presents peptide fragments mainly from degraded intravesicular and extracellular proteins to CD4⁺ T lymphocytes. Specific alleles of HLA-DQ have been linked to the pathogenesis of several autoimmune diseases (including diabetes), both as a susceptibility and resistance factor depending on the particular polymorphism.

Antigen References: 1. So AK, *et al.* 1987. *J. Immunol.* 139:3506.
2. Gyllenstein UB Erlih HA. 1989. *Proc. Natl. Acad. Sci. USA* 86:9986.
3. Sonderstrup G and McDevitt HO. 2001. *J. Clin. Invest.* 107:795.

Related Products:

Product

Cell Staining Buffer

PE Mouse IgG1, κ Isotype Ctrl (FC)

Human TruStain FcX™ (Fc Receptor Blocking Solution)

Clone

MOPC-21

Application

FC, ICC, ICFC

FC

FC, ICC, ICFC



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