

# Product Data Sheet

## FITC anti-human HLA-DQ

**Catalog # / Size:** 318103 / 25 tests  
318104 / 100 tests

**Clone:** HLADQ1

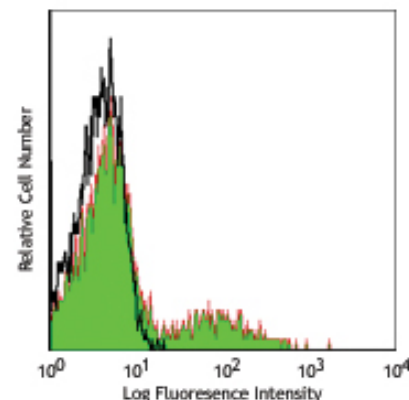
**Isotype:** Mouse IgG1,  $\kappa$

**Reactivity:** Human

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

**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 HLA-DQ1 FITC

## 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  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ 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](http://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.

**Description:** HLA-DQ is also known as MHC class II DQ monomorphic antigen. The major histocompatibility complex is composed of two heterodimeric glycoproteins ( $\alpha$  and  $\beta$  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  $\alpha$  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 Erlh 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  
FITC Mouse IgG1,  $\kappa$  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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