SONY

Product Data Sheet

Alexa Fluor® 647 anti-human HLA-DR, DP, DQ

Catalog # / Size: 2408520 / 100 tests
2408515 / 25 tests

Clone: Tü39

Isotype: Mouse IgG2a, κ

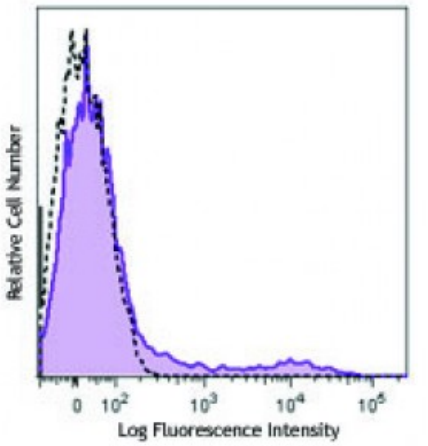
Immunogen: Human PBL

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.

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

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with purified HLA-DR, DP, DQ (clone Tü39) Alexa Fluor® 647 (filled histogram) or mouse IgG2a, κ Alexa Fluor® 647 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

Application Notes: Tü39 has been reported to react with a shared epitope of HLA-DR, HLA-DP, and HLA-DQ.

Additional reported applications (of relevant formats) include immunoprecipitation[6], *in vitro* blocking of MLR5, and suppressor cell generation4. The LEAF™ purified antibody (Endotoxin <0.1 EU/microg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (contact our custom solutions team).

Application References:

1. Pawelec G, *et al.* 1985. *Hum. Immunol.* 12:165.
2. Shaw S, *et al.* 1985. *Hum. Immunol.* 12:191.
3. Ziegler A, *et al.* 1986. *Immunobiology* 171:77.
4. Pawelec G, *et al.* 1986. *Hum. Immunol.* 17:343. (Block)
5. Dai Z, *et al.* 2009. *J. Exp. Med.* 206:793. (Block)
6. Pawelec G, *et al.* 1988. *J. Exp. Med.* 167:243. (IP)

Description: HLA-DR, HLA-DP, and HLA-DQ are heterodimeric cell surface glycoproteins comprised of an α (heavy) chain and a β (light) chain. They are expressed on B cells, activated T cells, monocytes/macrophages, dendritic cells, and other non-professional APCs. In conjunction with the CD3/TCR complex and CD4 molecules,

HLA-DR is critical for efficient peptide presentation to CD4+ T cells. Variations in the HLA gene expression are crucial to graft survival.

Antigen References:

1. Thorsby E. 1974. *Transplant. Rev.* 18:51.
2. Qvigstad E, *et al.* 1984. *Hum. Immunol.* 11:207.
3. Servenius B, *et al.* 1984. *EMBO J.* 3:3209.
4. Ottenhoff TH, *et al.* 1985. *Hu*