

Product Data Sheet

Biotin anti-human CD99

Catalog # / Size: 318004 / 100 µg

Clone: HCD99

Isotype: Mouse IgG2a, κ

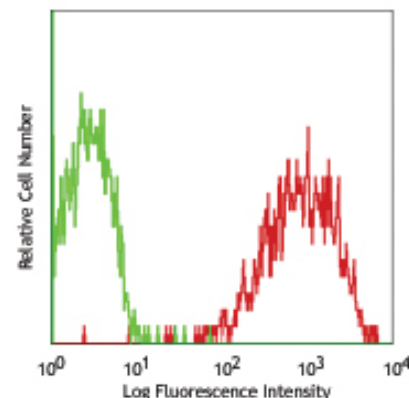
Reactivity: Human

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

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. **Do not freeze.**



Human peripheral blood lymphocytes stained with biotinylated HCD99, followed by Sav-PE

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.5 µg per 10⁶ cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported (for the relevant formats) applications include: immunohistochemical staining of acetone-fixed frozen sections and formalin-fixed paraffin-embedded tissues.

Application References: 1. Tadamitsu K, *et al.* eds. 1997. Leukocyte Typing VI Garland Publishing Inc. London.

Description: The HCD99 monoclonal antibody recognizes human CD99 also known as CD99 antigen, E2 antigen, MIC2, and T-cell surface glycoprotein E2. CD99 is a type I, single chain transmembrane protein devoid of N-linked glycosylation sites that is encoded by the pseudoautosomal gene MIC2. CD99 has an apparent molecular weight 32 kD and is widely expressed on a variety of tissues. CD99 is highly expressed on thymocytes, T cells, T cell leukemias and lymphomas and is absent on fetal B cells, some B cell lines, eosinophils, granulocytes and the NK-cell line YT. CD99 is involved in spontaneous rosette formation with erythrocytes and may also be involved in other T-cell and hematopoietic cell adhesion pathways. CD99 has been reported to activate a caspase-independent death pathway in T cells under some conditions. CD99 interacts with a number of proteins including ferritin heavy chain 1, karyopherin beta 1, TRIP13, cyclophilin A, annexin II, and ubiquitin-conjugating enzyme E2H. The HCD99 antibody has been reported to be useful for flow cytometric detection of human CD99 and immunohistochemistry (acetone-fixed frozen tissues and formalin-fixed paraffin-embedded tissues).

Antigen References: 1. Gelin C, *et al.* 1989. *EMBO J.* 8:3253.
 2. Goodfellow PJ, *et al.* 1986. *Science* 234:740.
 3. Pettersen RD, *et al.* 2001. *J. Immunol.* 166:4931.

Related Products:

Product	Clone	Application
Biotin Mouse IgG2a, κ Isotype Ctrl	MOPC-173	FC, ICFC
APC Streptavidin		FC, ICFC
PE Streptavidin		FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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