

1P-658-T100

## Monoclonal Antibody to CD99 Phycoerythrin (PE) conjugated (100 tests)

Clone: 3B2/TA8

**Isotype:** Mouse IgG2a

Specificity: The mouse monoclonal antibody 3B2/TA8 recognizes CD99, an approximately 32

kDa sialoglycoprotein expressed on many cell types, with particularly strong expression on Ewing's sarcoma and peripheral primitive neuroectodermal tumors. Within the hematopoietic system, CD99 is expressed on virtually all cell types

except granulocytes.

HLDA VI.; WS Code T 6T-097, BP 534

Regulatory Status: RUO

Immunogen: Human thymocytes

Species Reactivity: Human

**Preparation:** The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using

10  $\mu$ l reagent / 100  $\mu$ l of whole blood or 10 $^{\circ}$  cells in a suspension.

The content of a vial (1 ml) is sufficient for 100 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD99 is a ubiquitous transmembrane type I sialoglycoprotein of a unique and

poorly characterized protein family. CD99 is heavily O-glycosylated and was described as a T cell costimulator and strong activator of integrin-mediated actin cytoskeleton assembly, promoting cell adhesion and homotypic aggregation, immediate arrest on an inflamed vascular endothelium, and cell migration through it. Ligation of CD99 under some conditions can lead to apoptosis. Originally CD99 was described as a human thymus leukemia antigen, an Ewing's sarcoma-specific membrane marker, and an adhesion molecule involved in spontaneous rosette

formation of T cells with erythrocytes.



## PRODUCT DATA SHEET

## References:

\*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997). \*Waclavicek M, Majdic O, Stulnig T, Berger M, Sunder-Plassmann R, Zlabinger GJ, Baumruker T, Stöckl J, Ebner C, Knapp W, Pickl WF: CD99 engagement on human peripheral blood T cells results in TCR/CD3-dependent cellular activation and allows for Th1-restricted cytokine production. J Immunol. 1998 Nov 1;161(9):4671-8.

\*Brémond A, Meynet O, Mahiddine K, Coito S, Tichet M, Scotlandi K, Breittmayer JP, Gounon P, Gleeson PA, Bernard A, Bernard G: Regulation of HLA class I surface expression requires CD99 and p230/golgin-245 interaction. Blood. 2009 Jan 8;113(2):347-57.

\*Pickl WF, Pimentel-Muiños FX, Seed B: Lipid rafts and pseudotyping. J Virol. 2001 Aug;75(15):7175-83.

\*Kueng HJ, Leb VM, Haiderer D, Raposo G, Thery C, Derdak SV, Schmetterer KG, Neunkirchner A, Sillaber C, Seed B, Pickl WF: General strategy for decoration of enveloped viruses with functionally active lipid-modified cytokines. J Virol. 2007 Aug;81(16):8666-76.

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