

1P-230-T025

Monoclonal Antibody to CD55 Phycoerythrin (PE) conjugated (25 tests)

Clone: MEM-118
Isotype: Mouse IqM

Specificity: The antibody MEM-118 recognizes an epitope in SCR4 domain of CD55 (Decay

accelerating factor, DAF), a 60-70 kDa glycosylphosphatidylinositol (GPI)-anchored single chain glycoprotein. CD55 is widely expressed on hematopoietic and on many non-hematopoietic cells; it is weakly present on NK

cells

HLDA V; WS Code AS S016

Regulatory Status: RUO

Immunogen: HPB-ALL human T cell line

Species Reactivity: Human, Non-Human Primates

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 Tris buffered saline (TBS) solution containing

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

The content of a vial (0.25 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD55 (decay-accelerating factor, DAF) is a GPI-anchored membrane glycoprotein

that protects autologous cells from classical and alternative pathway of complement cascade. Bidirectional interactions between CD55 and CD97 are involved in T cell regulation and CD55 can still regulate complement when bound to CD97. In tumours, besides protection agains complement, CD55 promotes

neoangiogenesis, tumorigenesis, invasiveness and evasion of apoptosis.



PRODUCT DATA SHEET

References:

*Miwa T, Maldonado MA, Zhou L, Sun X, Luo HY, Cai D, Werth VP, Madaio MP, Eisenberg RA, Song WC: Deletion of decay-accelerating factor (CD55) exacerbates autoimmune disease development in MRL/lpr mice. Am J Pathol. 2002 Sep;161(3):1077-86.

*Mikesch JH, Buerger H, Simon R, Brandt B: Decay-accelerating factor (CD55): a versatile acting molecule in human malignancies. Biochim Biophys Acta. 2006 Aug;1766(1):42-52.

*Abbott RJ, Spendlove I, Roversi P, Fitzgibbon H, Knott V, Teriete P, McDonnell JM, Handford PA, Lea SM: Structural and functional characterization of a novel T cell receptor co-regulatory protein complex, CD97-CD55. J Biol Chem. 2007 Jul 27;282(30):22023-32.

*VanLandingham JW, Cekic M, Cutler S, Hoffman SW, Stein DG: Neurosteroids reduce inflammation after TBI through CD55 induction. Neurosci Lett. 2007 Sep 25;425(2):94-8.

*Miwa T, Maldonado MA, Zhou L, Yamada K, Gilkeson GS, Eisenberg RA, Song WC: Decay-accelerating factor ameliorates systemic autoimmune disease in MRL/lpr mice via both complement-dependent and -independent mechanisms. Am J Pathol. 2007 Apr;170(4):1258-66.

*Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995). *Angelisová P, Drbal K, Horejsí V, Cerný J: Association of CD10/neutral endopeptidase 24.11 with membrane microdomains rich in glycosylphosphatidylinositol-anchored proteins and Lyn kinase. Blood. 1999 Feb 15;93(4):1437-9.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.