



Antibodies

1B-230-C025

## Monoclonal Antibody to CD55 Biotin conjugated (0.025 mg)

<b>Clone:</b>	MEM-118
<b>Isotype:</b>	Mouse IgM
<b>Specificity:</b>	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
<b>Immunogen:</b>	HPB-ALL human T cell line
<b>Species Reactivity:</b>	Human, Non-Human Primates
<b>Preparation:</b>	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	Biotinylated antibody is designed for indirect immunofluorescence analysis by Flow Cytometry. Suggested working dilution is 1:500. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	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 against complement, CD55 promotes neoangiogenesis, tumorigenesis, invasiveness and evasion of apoptosis.

**For laboratory research only, not for drug, diagnostic or other use.**

**Antibodies****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.

**For laboratory research only, not for drug, diagnostic or other use.**