

Monoclonal Antibody to CD55 / DAF - FITC

Alternate names: Complement decay-accelerating factor

Catalog No.: SM3030F Quantity: 100 Tests

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.

Uniprot ID: <u>P08174</u>
NCBI: <u>9606</u>

Host / Isotype: Mouse / IgM Clone: MEM-118

Immunogen: HPB-ALL human T cell line

Format: State: Liquid purified Ig fraction

Buffer System: Tris buffered saline (TBS) **Preservatives:** 15 mM sodium azide

Stabilizers: 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA)

Label: FITC - Fluorescein Isothiocyanate

Applications: Flow Cytometry: Analysis of Human blood cells using 20 µl reagent/100 µl of whole blood

or 10e6 cells in a suspension.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: The antibody 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.

Species: Human and Non-Human Primates.

Other species not tested.

Storage: Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

General References: 1. 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.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.



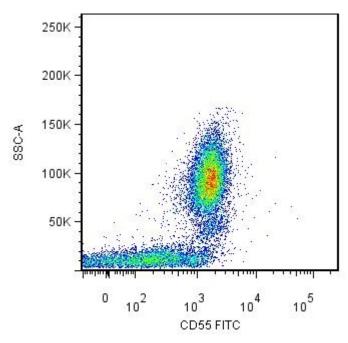
- 2. Mikesch JH, Buerger H, Simon R, Brandt B: Decay-accelerating factor (CD55): a versatile acting molecule in human malignancies. Biochim Biophys Acta. 2006 Aug;1766(1):42-52.

 3. 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.

 4. 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.

 5. 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.
- 6. Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).
 7. 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.

Pictures:



Surface staining of Human peripheral blood leukocytes by Mouse monoclonal anti-CD55 antibody MEM-118.