

1F-267-T025

Monoclonal Antibody to CD97 Fluorescein (FITC) conjugated (25 tests)

Clone: MEM-180
Isotype: Mouse IgG1

Specificity: The antibody MEM-180 recognizes a unique epitope on CD97, a 75-85 kDa

surface glycoprotein of G-protein-coupled receptor family, expressed on activated B and T lymphocytes, monocytes/macrophages, dendritic cells and granulocytes.

HLDA VI; WS Code BP 415 HLDA VI; WS Code NL N-L023

Regulatory Status: RUO

Immunogen: PHA-activated peripheral blood cells

Species Reactivity: Human

Preparation: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under

optimum conditions. The reagent is free of unconjugated FITC 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

20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension.

The content of a vial (0.5 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD97 is a G-protein-coupled seven-span transmembrane adhesive receptor that is

constitutively expressed on granulocytes and monocytes and rapidly upregulated on T and B cells upon activation. CD97 is produced in alternatively spliced forms and its cellular ligand is CD55 (DAF), which protects various cell types from complement-mediated damage. Interaction of CD97 on leukocytes and CD55 on vessel cells probably facilitate leukocyte activation and migration into the tissues, similarly, CD97 seems to play a role in tumour migration and invasiveness. CD97

is involved in T cell regulation and peripheral granulocyte homeostasis.



PRODUCT DATA SHEET

References:

*Visser L, de Vos AF, Hamann J, Melief MJ, van Meurs M, van Lier RA, Laman JD, Hintzen RQ. Expression of the EGF-TM7 receptor CD97 and its ligand CD55 (DAF) in multiple sclerosis. J Neuroimmunol. 2002 Nov;132(1-2):156-63.

*Galle J, Sittig D, Hanisch I, Wobus M, Wandel E, Loeffler M, Aust G: Individual cell-based models of tumor-environment interactions: Multiple effects of CD97 on tumor invasion. Am J Pathol. 2006 Nov;169(5):1802-11.

*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.

*Wang T, Tian L, Haino M, Gao JL, Lake R, Ward Y, Wang H, Siebenlist U, Murphy PM, Kelly K: Improved antibacterial host defense and altered peripheral granulocyte homeostasis in mice lacking the adhesion class G protein receptor CD97. Infect Immun. 2007 Mar;75(3):1144-53.

*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997). *Wobus M, Vogel B, Schmücking E, Hamann J, Aust G: N-glycosylation of CD97 within the EGF domains is crucial for epitope accessibility in normal and malignant cells as well as CD55 ligand binding. Int J Cancer. 2004 Dec 10;112(5):815-22.

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