SONY

Product Data Sheet

PE/Dazzle™ 594 anti-human CD9

Catalog # / Size: 2160585 / 25 tests
2160590 / 100 tests

Clone: HI9a

Isotype: Mouse IgG1, κ

Immunogen: Human PMN cells

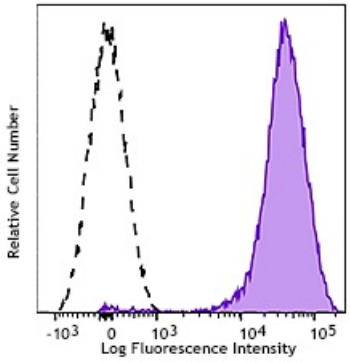
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: V P018

Concentration: Lot-specific



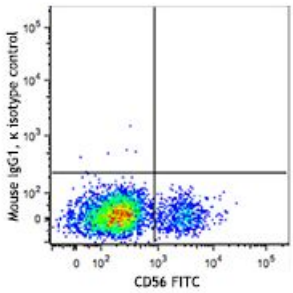
Human platelets were stained with CD9 (clone HI9a) PE/Dazzle™ 594 (filled histogram) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.



BT474 breast cancer cell line was stained with anti-human CD9, detected with anti-mouse DyLight™ 649, and nuclear counterstained with DAPI. Images were acquired with a TE300 fluorescence microscope with a 20x objective. Data provided by: Er Liu and John Nolan, La Jolla Bioengineering Institute

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Application Notes: Clone HI111 epitope maps to the top region of the I domain that is close to the putative ligand-binding site surrounding the MIDAS (metal ion-dependent adhesion site). HI111 is specific for the closed confirmation of the integrin[8]. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections, Western blotting[2], and blocking of cell-cell interaction and inhibition the binding of ICAM-1[4]. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 301233 & 301234).

Application References:

1. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.

Description: CD9 is a 24 kD type III transmembrane protein also known as tetraspanin, MRP-1 and DRAP-24. It is a member of the tetraspan family (spanning the membrane four times) found on platelets, B cell progenitors, activated lymphocytes, granulocytes, endothelial cells and epithelial cells. CD9 induces adhesion, platelet aggregation, and B cell development. CD9 has been shown to associate with CD63, CD81, CD82, and CD36 and to bind to β_1 integrins.

Antigen References:

1. Miao WM, *et al.* 2001 *Blood* 97:1689.
2. Ellerman DA, *et al.* 2003 *Mol. Biol Cell.* (Epub ahead of print).
3. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.

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