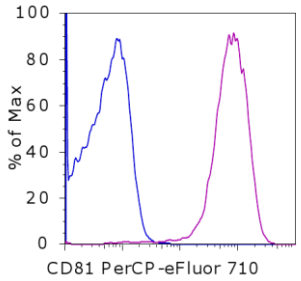
Anti-Human CD81 PerCP-eFluor® 710

Catalog Number: 46-0819
Also known as: TAPA-1
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (cat. 46-4714) (blue histogram) or Anti-Human CD81 PerCP-eFluor® 710 (purple histogram). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD81 PerCP-eFluor® 710
REF **Catalog Number:** 46-0819
Clone: 1D6-CD81
Concentration: 5 uL (0.5 ug)/test
Host/Isotype: Mouse IgG1

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial
Contains sodium azide

Description

This 1D6-CD81 monoclonal antibody reacts with human CD81, which is also known as Target of Anti-Proliferative Ab-1 (TAPA-1). A member of the tetraspanin superfamily of transmembrane proteins, CD81 is widely expressed on immune cells such as B, T, and NK cells, monocytes, and eosinophils. Studies suggest that the highest expression of CD81 can be found on germinal center B cells. This protein can also be detected on non-Hodgkin lymphomas and diffuse large B-cell lymphomas. On B cells, CD81 exists in a complex with CD19, CD21, and Leu13. CD81 plays a role in segregating the CD19/CD21-B cell receptor complexes to lipid rafts to activate signal transduction. Finally, CD81 is a receptor for hepatitis C virus.

The 1D6 monoclonal antibody has been reported to induce adhesion and reduce cell proliferation.

Applications Reported

This 1D6-CD81 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 1D6-CD81 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.5 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 uL cell sample + 100 uL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance

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after fixation can be made, but clone specific performance should be determined empirically.

References

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Luo RF, Zhao S, Tibshirani R, Myklebust JH, Sanyal M, Fernandez R, Gratzinger D, Marinelli RJ, Lu ZS, Wong A, Levy R, Levy S, Natkunam Y. CD81 protein is expressed at high levels in normal germinal center B cells and in subtypes of human lymphomas. Hum Pathol. 2010 Feb;41(2):271-80.

Levy S, Todd SC, Maecker HT. CD81 (TAPA-1): a molecule involved in signal transduction and cell adhesion in the immune system. Annu Rev Immunol. 1998;16:89-109.

Schick MR, Levy S. The TAPA-1 molecule is associated on the surface of B cells with HLA-DR molecules. J Immunol. 1993 Oct 15;151(8):4090-7. (**1D6**, WB)

Related Products

46-4714 Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (P3.6.2.8.1)

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