

Anti-Mouse CD41 PE

Catalogue Number : 03512-60

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: MWReg30

Format/Conjugate: PE

Concentration: 0.2 mg/mL

Reactivity: Mouse

Laser: Blue (488nm), Yellow/Green (532-561nm)

Peak Emission: 578nm

Peak Excitation: 496nm

Filter: 585/40

Brightness (1=dim,5=brightest): 5

Isotype: Rat IgG1, kappa

Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.

Applications: FC

Description

The MWReg30 monoclonal antibody specifically reacts with mouse CD41, a transmembrane glycoprotein also known as integrin alpha 2b GPIIb. It is expressed on hematopoietic progenitors, megakaryocytes, and platelets. It forms a receptor with CD61 (integrin beta 3) that binds adhesion molecules such as fibrinogen, fibronectin, von Willebrand factor, and thrombin. Defects or absence of CD41 has been found to lead to coagulation disorders. The expression profile of CD150+, CD48-, and CD41- can be used to identify hematopoietic stem cells.

Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.06 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

- Schmidt, R. E., Grau, G. E., Mannel, D. N., Nieswandt, B., Echtenacher, B., Wachs, F. P., ... ; Gessner, J. E. (1999). Acute Systemic Reaction and Lung Alterations Induced by an Antiplatelet. *Blood*, 94(2), 684-693.
- Bertrand, J. Y., Giroux, S., Golub, R., Klaine, M., Jalil, A., Boucontet, L., ... ; Cumano, A. (2005). Characterization of purified intraembryonic hematopoietic stem cells as a tool to define their site of origin. *Proceedings of the National Academy of Sciences of the United States of America*, 102(1), 134-139.
- Mitjavila-Garcia, M. T., Cailleret, M., Godin, I., Nogueira, M. M., Cohen-Solal, K., Schiavon, V., ... ; Vainchenker, W. (2002). Expression of CD41 on hematopoietic progenitors derived from embryonic hematopoietic cells. *Development*, 129(8), 2003-2013.