

Anti-Mouse/Rat CD42d PerCP-eFluor® 710

Catalog Number: 46-0421

Also known as: platelet glycoprotein V, GP5, GPV RUO: For Research Use Only. Not for use in diagnostic procedures.



Description

The monoclonal antibody 1C2 recognizes mouse and rat CD42d, a single transmembrane protein also known as platelet glycoprotein V (GPV). CD42d interacts with CD42a, CD42b and CD42c to form the receptor for von willebrand factor and thrombin. This functional complex plays a role in platelet adhesion. Expression of CD42d (unlike other markers such as CD41) is restricted to resting platelets and megakaryocytes and therefore is a good marker for development of megakaryocytes.

Applications Reported

This 1C2 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 1C2 antibody has been tested by flow cytometric analysis of mouse platelets. This can be used at less than or equal to 0.25 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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

References

Takada K, Saito M, Kaneko H, Iizuka K, Kokai Y, Fujimoto J. Novel monoclonal antibody reactive with thrombin-



Anti-Mouse/Rat CD42d PerCP-eFluor® 710

Catalog Number: 46-0421 Also known as: platelet glycoprotein V, GP5, GPV RUO: For Research Use Only. Not for use in diagnostic procedures.

sensitive 74-kDa glycoproteins present on platelets and megakaryocytes both from mouse and rat. Hybridoma. 1995 Aug;14(4):361-7 (**1C2**, FC, IHC frozen, IP. PubMed)

Sato N, Kiyokawa N, Takada K, Itagaki M, Saito M, Sekino T, Suzuki T, Taguchi T, Mimori K, Lanza F, Fujimoto J. Characterization of monoclonal antibodies against mouse and rat platelet glycoprotein V (CD42d). Hybridoma. 2000 Dec;19(6):455-61 (**1C2**, IP, PubMed)

Related Products

11-0411 Anti-Mouse CD41 FITC (eBioMWReg30 (MWReg30)) 46-4888 Armenian Hamster IgG Isotype Control PerCP-eFluor® 710 (eBio299Arm)