

## Anti-Human CD338 (ABCG2) PE

Catalog Number :40411-60

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

### Product Information

**Clone:** 5D3

**Format/Conjugate:** PE

**Concentration:** 5 uL (0.25ug)/test

**Reactivity:** Human

**Laser:** Blue (488nm)

**Peak Emission:** 578nm

**Peak Excitation:** 496nm

**Filter:** 585/40

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

**Isotype:** Mouse IgG2b, 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 5D3 monoclonal antibody binds to CD338 (ABCG2), a multi-drug resistance (MDR) protein that is highly expressed on primitive side population stem cells, a subset of cells that express low or undetectable levels of CD34. CD338 is involved in the transport of molecules across extra- and intra-cellular membranes.

### 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. The antibody can be used at less than or equal to 5 µL per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100 µL.

### References

- Özvegy-Laczka, C., Laczkó, R., Hegedűs, C., Litman, T., Várady, G., Goda, K., ... Sarkadi, B. (2008). Interaction with the 5D3 monoclonal antibody is regulated by intramolecular rearrangements but not by covalent dimer formation of the human ABCG2 multidrug transporter. *Journal of Biological Chemistry*, 283(38), 26059-26070.
- Zhou, S., Schuetz, J. D., Bunting, K. D., Colapietro, A. M., Sampath, J., Morris, J. J., ... Sorrentino, B. P. (2001). The ABC transporter Bcrp1/ABCG2 is expressed in a wide variety of stem cells and is a molecular determinant of the side-population phenotype. *Nature medicine*, 7(9), 1028-1034.
- Bunting, K. D. (2002). ABC transporters as phenotypic markers and functional regulators of stem cells. *Stem cells*, 20(1), 11-20.