

Anti-Human CD117 (c-Kit) APC

Catalog Number :19211-80

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

Product Information

Clone: YB5.B8

Format/Conjugate: APC

Concentration: 5 uL (0.5 ug)/test

Reactivity: Human

Laser: Red (635 -655nm)

Peak Emission: 660nm

Peak Excitation: 650nm

Filter: 660/20

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

Isotype: Mouse 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 YB5.B8 monoclonal antibody specifically binds with human CD117 (c-kit), the 145 kDA receptor for stem cell factor (SCF) or steel factor. This tyrosine kinase protein is expressed mainly on hematopoietic progenitor, mast cells, acute myeloid leukemia cells (AML). CD117 activation promotes proliferation and cell differentiation on these cell subtypes. A lack or defect of SCF can lead to a decrease in number of hematopoietic progenitor cells and severe anemia.

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 ≤0.5 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

- Schlossman, S. F. (1995).;Leucocyte typing V: White cell differentiation antigens: Proceedings of the Fifth International Workshop and Conference, Held in Boston, USA 3-7 November, 1993. Oxford University Press.
- Yarden, Y., Kuang, W. J., Yang-Feng, T., Coussens, L., Munemitsu, S., Dull, T. J., ... Ullrich, A. (1987). Human proto-oncogene c-kit: a new cell surface receptor tyrosine kinase for an unidentified ligand.;The EMBO Journal,;6(11), 3341.
- Lerner, N. B., Nocka, K. H., Cole, S. R., Qiu, F. H., Strife, A., Ashman, L. K., Besmer, P. (1991). Monoclonal antibody YB5. B8 identifies the human c-kit protein product.;Blood,;77(9), 1876-1883.