

Anti-Mouse CD117 (c-Kit) PE

Catalogue Number : 19112-60

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

Product Information

Clone: ACK2

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 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 ACK2 monoclonal antibody specifically reacts with mouse CD117 (c-Kit receptor), a 145 kDa transmembrane tyrosine-kinase receptor encoded by the Kit gene. The c-Kit receptor, also known as stem cell factor receptor, is expressed on hematopoietic progenitor cells in adult bone marrow, in progenitors of erythroid and myeloid lineages, and precursors of B and T cells. CD117 enhances the proliferation and the differentiation of the hematopoietic progenitor cells and seems to enhance the development of T cells, as the c-Kit receptor and its ligand are expressed by the thymus.

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

- Godfrey, D. I., Kennedy, J., Mombaerts, P., Tonegawa, S., ; Zlotnik, A. (1994). Onset of TCR-beta gene rearrangement and role of TCR-beta expression during CD3-CD4-CD8-thymocyte differentiation. *The Journal of Immunology*,;152(10), 4783-4792.
- Godfrey, D. I., Zlotnik, A. L. B. E. R. T., ; Suda, T. A. K. A. S. H. I. (1992). Phenotypic and functional characterization of c-kit expression during intrathymic T cell development.;*The Journal of Immunology*,;149(7), 2281-2285.
- Feng, H., Sandlow, J. I., ; Sandra, A. (1998). The c-kit receptor and its possible signaling transduction pathway in mouse spermatozoa.;*Molecular reproduction and development*,;49(3), 317-326.