

## Anti-Mouse CD117 (c-Kit) APC

Catalog Number :19112-80

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

### Product Information

**Clone:** ACK2

**Format/Conjugate:** APC

**Concentration:** 0.2 mg/mL

**Reactivity:** Mouse

**Laser:** Red (635 -655nm)

**Peak Emission:** 660nm

**Peak Excitation:** 650nm

**Filter:** 660/20

**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

1. 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.
2. 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.
3. 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.