

## Anti-Mouse CD45.1 PE

Catalogue Number : 07522-60

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

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### Product Information

**Clone:** A20

**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:** Mouse IgG2a, 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 A20 monoclonal antibody reacts with the leukocytes of the CD45.1-expressing mouse strains (DA, SJL/J, RIII, and STS/A). It does not cross-react with cells that express CD45.2.

The CD45 molecule is a member of the Protein Tyrosine Phosphatase (PTP) family, because its intracellular region contains two PTP domains. The extracellular region's variability is caused by different levels of glycosylation, and the splicing of the 4, 5, and 6 exons. The isoforms found in the mouse strains depend on the activation state, maturation stage and cell type, and are very important in B and T lymphocytes antigen receptor signal transduction. The A20 antibody inhibits some of the B lymphocytes responses, from CD45.1-expressing mice, to lipopolysaccharides and antigens.

### 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

1. Shen, F.W. (1981) Monoclonal antibodies to mouse lymphocyte differentiation alloantigens. *Monoclonal Antibodies and T-Cell Hybridomas: Perspectives and Technical Advances*. G.J. Hämmerling, U. Hämmerling, and J.F. Kearney, editors. Elsevier/North-Holland, Amsterdam. pp. 25;31.
2. Yakura, H. I. D. E. T. A. K. A., Kawabata, I., Shen, F. W., ; Katagiri, M. (1986). Selective inhibition of lipopolysaccharide-induced polyclonal IgG response by monoclonal Ly-5 antibody.; *The Journal of Immunology*.;136(8), 2729-2733.
3. Yakura, H., Shen, F. W., Bourcet, E., ; Boyse, E. A. (1983). On the function of Ly-5 in the regulation of antigen-driven B cell differentiation. Comparison and contrast with Lyb-2.; *The Journal of experimental medicine*.;157(4), 1077-1088.