

Anti-Rat CD45R (B220) FITC

Catalog Number :07113-50

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

Product Information

Clone: HIS24

Format/Conjugate: FITC

Concentration: 0.5 mg/ml

Reactivity: Rat

Laser: Blue (488nm)

Peak Emission: 520nm

Peak Excitation: 494nm

Filter: 530/30

Brightness (1=dim,5=brightest): 3

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 HIS24 monoclonal antibody specifically reacts with an isoform of the rat CD45 glycoprotein. CD45R/B220 is expressed on all the development stages of B cells to the exclusion of plasma cells. 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 HIS24 antibody is useful as a marker for the identification of B-cell progenitors.

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 ≤1 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1. Hermans, M. H. A., Deenen, G. J., De Boer, N., Bo, W., Kroese, F. G. M., Opstelten, D. (1997). Expression of HIS50 Ag: a rat homologue of mouse heat-stable antigen and human CD24 on B lymphoid cells in the rat.; Immunology, 90(1), 14-22.
2. Kroese, F. G., Butcher, E. C., Lalor, P. A., Stall, A. M., Herzenberg, L. A. (1990). The rat B cell system: The anatomical localization of flow cytometry-defined B cell subpopulations.; European journal of immunology, 20(7), 1527-1534. Kroese, F. G. M., Opstelten, D., Wubbena, A. S., Deenen, G. J., Aten, J., Schwander, E. H., ... Nieuwenhuis, P. (1985). Monoclonal antibodies to rat B lymphocyte (sub-) populations. In; Microenvironments in the Lymphoid System (pp. 81-89). Springer US.