

## Anti-Rat CD3 PE

Catalogue Number : 05113-60

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

### Product Information

**Clone:** G4.18

**Format/Conjugate:** PE

**Concentration:** 0.5 mg/mL

**Reactivity:** Rat

**Laser:** Blue (488nm), Yellow/Green (532-561nm)

**Peak Emission:** 578nm

**Peak Excitation:** 496nm

**Filter:** 585/40

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

**Isotype:** Mouse IgG3, 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 G4.18 monoclonal antibody specifically reacts with rat CD3, a T cell lineage marker and associated with the T cell receptor (TCR). CD3 is involved in antigen recognition, cell activation, and signal transduction and is found on subsets of NK-T, peripheral T, dendritic epidermal T, and thymocyte cells. Immobilized G4.18 antibody activates T cells in vitro and in vivo treatments of the G4.18 antibody prevents cardiac and skin allograft rejection.

### 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. The antibody can be used at less than or equal to 5 µL per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100 µL.

### References

1. Nicolls, M. R., Aversa, G. G., Pearce, N. W., Spinelli, A., Berger, M. F., Gurley, K. E., ; Hall, B. M. (1993). Induction of long-term specific tolerance to allografts in rats by therapy with an anti-CD3-like monoclonal antibody. *Transplantation*, 55(3), 459-468.
2. Morris, D. L., ; Komocsar, W. J. (1997). Immunophenotyping analysis of peripheral blood, splenic, and thymic lymphocytes in male and female rats. *Journal of pharmacological and toxicological methods*, 37(1), 37-46.
3. Tran, G. T., Carter, N., He, X. Y., Spicer, T. S., Plain, K. M., Nicolls, M., ... ; Hodgkinson, S. J. (2001). Reversal of experimental allergic encephalomyelitis with non-mitogenic, non-depleting anti-CD3 mAb therapy with a preferential effect on Th1 cells that is augmented by IL-4. *International immunology*, 13(9), 1109-1120.