

Anti-Rat CD3 FITC

Catalogue Number : 05113-50

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

Product Information

Clone: G4.18

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 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.