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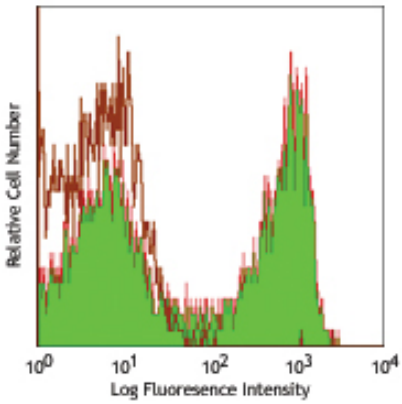
Product Data Sheet

PE anti-rat TCR α/β

Catalog # / Size: 201107 / 50 µg
Clone: R73
Isotype: Mouse IgG1, κ
Immunogen: Rat T cell blasts & erythrocytes
Reactivity: Rat, **Cross-Reactivity:** Cynomolgus, Rhesus
Preparation: The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration: 0.2 mg/ml
Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



LOU rat splenocytes stained with R73 PE

Applications:

Applications: FC - *Quality tested*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation, Western blotting[3], immunohistochemical staining of acetone-fixed frozen sections[1], *in vitro* activation of α/β TCR$^+$ T cells [1,2] and *in vivo* depletion[2] of α/β TCR$^+$ T cells . The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 201112).

Application References:
1. Hunig T, *et al.* 1989. *J. Exp. Med.* 169:73. (IHC)
2. Mitnacht R, *et al.* 1995. *Eur. J. Immunol.* 25:328. (IHC)
3. Brenan M, *et al.* 1997. *Eur. J. Immunol.* 27:3070. (WB)
4. Yoshino N, *et al.* 2000. *Exp. Anim.* 49:97.

Description: TCR α and β are members of the immunoglobulin superfamily and components of the CD3/TCR complex expressed on most peripheral T cells, intestinal epithelial lymphocytes, and thymocytes. The CD3/TCR complex plays a key role in antigen recognition, signal transduction, and T cell activation. The TCR α/β recognizes peptide bound to MHC class I and II.

Antigen References:
1. Hunig T, *et al.* 1989. *J. Exp. Med.* 169:73.
2. Fangmann J, *et al.* 1991. *Eur. J. Immunol.* 21:753.
3. Mitnacht R, *et al.* 1995. *Eur. J. Immunol.* 25:328.
4. Peiters RH, *et al.* 1995. *Biochem. Biophys. Res. Commun.* 214:552.
5. Brenan M, *et al.* 1997. *Eur. J. Immunol.* 27:3070.

Related Products:

Product	Clone	Application
PE Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC

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