

PE anti-rat TCR α/β Antibody

Catalog# / Size	201107 / 50 μ g
Clone	R73
Regulatory Status	RUO
Other Names	TCR α/β , α/β TCR
Isotype	Mouse (BALB/c) IgG1, κ
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.

Product Details

Verified Reactivity	Rat
Reported Reactivity	Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Rat T cell blasts & erythrocytes
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 μ g per million cells in 100 μ l volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation, Western blotting ³ , immunohistochemical staining of acetone-fixed frozen sections ¹ , <i>in vitro</i> activation of α/β TCR ⁺ T cells ^{1,2} and <i>in vivo</i> depletion ² of α/β TCR ⁺ T cells. The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 201112).
Application References (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"> Hunig T, <i>et al.</i> 1989. <i>J. Exp. Med.</i> 169:73. Mitnacht R, <i>et al.</i> 1995. <i>Eur. J. Immunol.</i> 25:328. Brenan M, <i>et al.</i> 1997. <i>Eur. J. Immunol.</i> 27:3070. Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim.</i> 49:97.
RRID	AB_313916 (BioLegend Cat. No. 201107)

Antigen Details

Structure	Ig superfamily, CD3/TCR complex with CD3 and TCR- α subunit, 40 and 46 kD
Distribution	Most peripheral T cells, intestinal epithelial lymphocytes, thymocytes
Function	Antigen recognition, T cell activation/responses
Ligand/Receptor	Peptide bound-MHC class I and II
Cell Type	Lymphocytes, T cells, Thymocytes
Biology Area	Adaptive Immunity, Immunology
Molecular Family	TCRs
Antigen References	<ol style="list-style-type: none"> Hunig T, <i>et al.</i> 1989. <i>J. Exp. Med.</i> 169:73. Fangmann J, <i>et al.</i> 1991. <i>Eur. J. Immunol.</i> 21:753. Mitnacht R, <i>et al.</i> 1995. <i>Eur. J. Immunol.</i> 25:328. Peiters RH, <i>et al.</i> 1995. <i>Biochem. Biophys. Res. Commun.</i> 214:552. Brenan M, <i>et al.</i> 1997. <i>Eur. J. Immunol.</i> 27:3070.
Gene ID	24820 290071

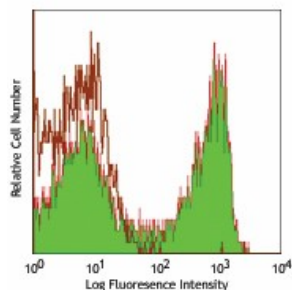
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-rat TCR α/β , FITC anti-rat TCR α/β , PE anti-rat TCR α/β , Alexa Fluor® 647 anti-rat TCR α/β

Product Data



LOU rat splenocytes stained with R73 PE

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