# **Technical Data Sheet**

# FITC Mouse Anti-Rat αβ T-Cell Receptor

#### **Product Information**

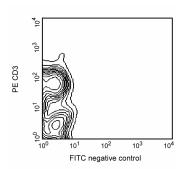
**Material Number:** 561672 Size: 50 μg 0.5 mg/mlConcentration: Clone:

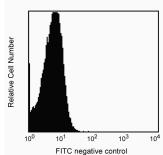
Rat T blasts and rat erythrocytes Immunogen: Mouse (BALB/c) IgG1, κ Isotype: Reactivity: QC Testing: Rat

Aqueous buffered solution containing ≤0.09% sodium azide. Storage Buffer:

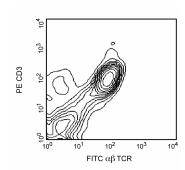
#### Description

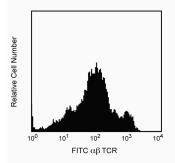
The R73 antibody reacts with the  $\alpha\beta$  T-cell Receptor (TCR) found on most peripheral T lymphocytes, intestinal intraepithelial lymphocytes, and thymocytes. It does not react with γδ TCR-bearing cells. Cross-linked R73 mAb induces T-cell differentiation and activation. In vivo treatment with mAb R73 can suppress immune function of peripheral αβ TCR-expressing T cells, and reduce the severity of experimental autoimmune, transplant rejection, and graft-versus-host responses.





αβ TCR expression in rat spleen and thymus. Lewis rat splenocytes were simultaneously stained with PE Mouse anti-Rat CD3 (Cat. No. 554833, left panels) and FITC Mouse anti-Rat  $\alpha\beta$ T-Cell Receptor mAb (bottom left panel) monoclonal antibodies. Lewis rat thymocytes were stained with FITC Mouse anti-Rat  $\alpha\beta$ T-Cell Receptor mAb (bottom right panel) or unstained (top right panel). Flow cytometry was performed on a BD FACScan™ flow cytometry system.





#### **Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

### **Application Notes**

#### Application

Flow cytometry Routinely Tested

# **Suggested Companion Products**

Catalog Number	Name	Size	Clone	
550616	FITC Mouse IgG1, κ Isotype Control	0.25 mg	MOPC-31C	
554833	PE Mouse Anti-Rat CD3	0.2 mg	G4.18	
554656	Stain Buffer (FBS)	500 ml	(none)	

## **BD Biosciences**

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#### **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 5. An isotype control should be used at the same concentration as the antibody of interest.

#### References

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Kiely PD, Thiru S, Oliveira DB. Inflammatory polyarthritis induced by mercuric chloride in the Brown Norway rat. *Lab Invest.* 1995; 73(2):284-293. (Biology) Mitnacht R, Tacke M, Hunig T. Expression of cell interaction molecules by immature rat thymocytes during passage through the CD4+8+ compartment: developmental regulation and induction by T cell receptor engagement of CD2, CD5, CD28, CD11a, CD44 and CD53. *Eur J Immunol.* 1995; 25(2):328-332. (Biology)

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