# **Technical Data Sheet**

# FITC Rat Anti-Mouse CD3 Molecular Complex

### **Product Information**

**Material Number:** 561798 Size: 0.1 mg 0.5 mg/ml Concentration: 17A2 Clone:

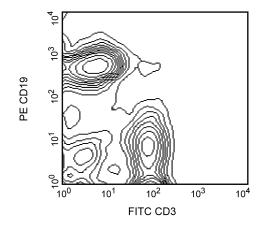
γδ TCR-positive T-T hybridoma D1 Immunogen:

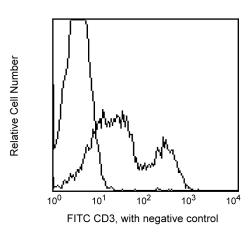
Rat (SD) IgG2b, κ **Isotype:** Reactivity: QC Testing: Mouse

Storage Buffer: Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium

#### Description

The 17A2 monoclonal antibody specifically binds to the T-cell receptor-associated CD3 complex that is expressed on many thymocytes and mature T lymphocytes. Plate-bound 17A2 antibody has been reported to induce IL-2 production by cultured T cells in the absence of accessory cells. The binding of the 17A2 antibody to T cells can be blocked by the anti-CD3e mAb 145-2C11. This suggests that the 17A2 antibody recognizes an epitope of the CD3 epsilon chain. In vivo treatment with 17A2 antibody has been reported to partially deplete T lymphocytes and temporarily down-modulates CD3 expression on T cells.





CD3 expression in spleen and thymus. BALB/c splenocytes were simultaneously stained with FITC Rat anti-Mouse CD3 Molecular Complex and PE Rat anti-Mouse CD19 (left panel). BALB/c thymocytes were also stained with FITC Rat anti-Mouse  ${\it CD3\ Molecular\ Complex\ (right\ panel)}.\ {\it Flow\ cytometry\ was\ performed\ on\ a\ BD\ FACScan^{\mbox{${}^{$}$}}\ 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	
553988	FITC Rat IgG2b, κ Isotype Control	0.25 mg	A95-1	
557399	PE Rat Anti-Mouse CD19	0.1 mg	1D3	
554656	Stain Ruffer (FRS)	500 ml	(none)	

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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.
- 3. 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

Miescher GC, Schreyer M, MacDonald HR. Production and characterization of a rat monoclonal antibody against the murine CD3 molecular complex. *Immunol Lett.* 1989; 23(2):113-118. (Immunogen: Cytotoxicity, Functional assay, Immunohistochemistry, Immunoprecipitation, Stimulation)
Mysliwietz J, Thierfelder S. Antilymphocytic antibodies and marrow transplantation. XII. Suppression of graft-versus-host disease by T-cell-modulating and depleting antimouse CD3 antibody is most effective when preinjected in the marrow recipient. *Blood.* 1992; 80(10):2661-2667. (Clone-specific: Depletion)

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