

**FITC anti-human/mouse Integrin  $\beta$ 7**

**Catalog # / Size:** 2206060 / 100 tests  
 2206065 / 50  $\mu$ g  
 2206070 / 500  $\mu$ g

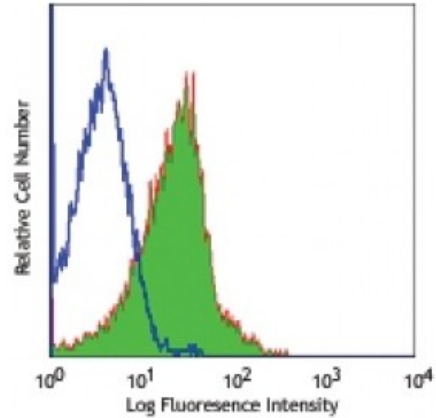
**Clone:** FIB504  
**Isotype:** Rat IgG2a,  $\kappa$   
**Immunogen:** TK1 cells  
**Reactivity:** Other

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

**Formulation:** test size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).  
 microg sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Workshop Number:** VI 6T-101, VI A024

**Concentration:** test size: lot-specific; microg sizes: 0.5



C57BL/6 mouse splenocytes stained with FIB504 FITC

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** The FIB504 antibody has been reported to react with mouse and human  $\beta$ 7 integrin and to block  $\beta$ 7 integrin-mediated cell adhesion in *in vitro* and *in vivo* studies. Additional reported applications (for the relevant formats) include: blocking of cell adhesion<sup>1,3,4</sup>. The LEAF™ purified FIB504 antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 321218).

- Application References:**
1. Andrew DP, *et al.* 1994. *J. Immunol.* 153:3847. (Block)
  2. Berlin C, *et al.* 1993. *Cell* 74:185.
  3. Rott LS, *et al.* 1996. *J. Immunol.* 156:3727. (Block)
  4. Rivera-Nieves J, *et al.* 2005. *J. Immunol.* 174:2343. (Block)
  5. Ohmori K, *et al.* 2009. *J. Immunol.* 182:2835. [PubMed](#)
  6. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

**Description:** Integrin  $\beta$ 7 is a 130 kD glycoprotein also known as integrin  $\beta$ p. It is a member of the Ig superfamily. In association with integrin  $\alpha$ 4 or  $\alpha$ E chain,  $\beta$ 7 forms  $\alpha$ 4/ $\beta$ 7 or  $\alpha$ E/ $\beta$ 7 heterodimer.  $\alpha$ 4/ $\beta$ 7 (CD49d/ $\beta$ 7, LPAM-1) is expressed on the majority of peripheral lymphocytes, on small subsets of thymocytes, and bone marrow

progenitors.  $\alpha 4/\beta 7$  binds to several ligands, VCAM-1, MAdCAM-1 and fibronectin, and is involved in lymphocyte adhesion and some hematopoietic progenitor cells migration.  $\alpha E/\beta 7$  (CD103/ $\beta 7$ ,  $\alpha_{IEL}/\beta 7$ ) is expressed on intestinal intraepithelial lymphocytes (IEL), dendritic epidermal T cells, T regulatory cells, a subset of CD8<sup>+</sup> T cells in lymph nodes and lamina propria. CD103/ $\beta 7$  complex is thought to play a role in lymphocyte retention via interaction with its ligand E-Cadherin.

**Antigen  
References:**

1. Andrew DP, *et al.* 1994. *J. Immunol.* 153:3847.
2. Picarella D, *et al.* 1997. *J. Immunol.* 158:2099.
3. Lefrancois L, *et al.* 1994. *Eur. J. Immunol.* 24:635
4. Cepek KL, *et al.*