## PerCP/Cy5.5 anti-human/mouse Integrin β7

Catalog # / Size: 2206095 / 25 tests

2206100 / 100 tests

Clone: FIB504

Isotype: Rat IgG2a, κ

Immunogen: TK1 cells
Reactivity: Other

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated

PerCP/Cy5.5 and unconjugated

antibody.

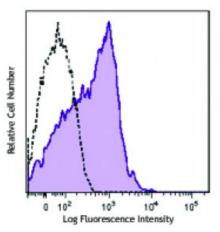
Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Workshop Number: VI 6T-101, VI A024

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with Integrin β7 (clone FIB504) PerCP/Cy5.5 (filled histogram) or rat IgG2a, κ PerCP/Cy5.5 isotype control (open histogram).

## **Applications:**

**Applications:** Flow Cytometry

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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

Application Notes:

The FIB504 antibody has been reported to react with mouse and human  $\beta7$  integrin and to block  $\beta7$  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<sup>TM</sup> purified FIB504 antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm 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. a4/ $\beta 7$  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.