

PE/Cyanine7 anti-human/mouse integrin β 7

Catalog # / Size: 2206210 / 100 tests
2206205 / 25 tests

Clone: FIB504

Isotype: Rat IgG2a, κ

Immunogen: TK1 cells

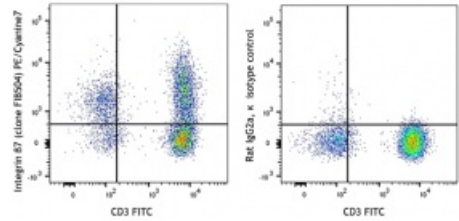
Reactivity: Human, Mouse, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cyanine7 under optimal conditions.

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 were stained with CD3 FITC and integrin β 7 (clone FIB504) PE/Cyanine7 (left) or rat IgG2a, κ PE/Cyanine7 isotype control (right).

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 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L 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 β 7 integrin and to block β 7 integrin-mediated cell adhesion in *in vitro* and *in vivo* studies. Additional reported applications (for the relevant formats) include: blocking of cell adhesion^{1,3,4}. The Ultra-LEAF™ purified FIB504 antibody (Endotoxin < 0.01 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 321233-321238).

- 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 βp . It is a member of the Ig superfamily. In association with integrin $\alpha 4$ or αE 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. LPAM-1 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+ 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.* 1994. *Nature* 372:190.