Product Data Sheet

APC/Fire™ 750 anti-human/mouse integrin β7

Catalog # / 2206120 / 100 tests

Size: 2206115 / 25 tests

Clone: FIB504

Isotype: Rat IgG2a, κ

Immunogen: TK1 cells

Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity

chromatography and conjugated with

APC/Fire™ 750 under optimal

conditions.

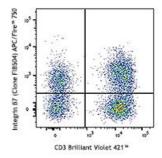
Formulation: Phosphate-buffered solution, pH 7.2,

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 Brilliant Violet 421[™] and Integrin β7 (clone FIB504) APC/Fire[™] 750 (top) or rat IgG2a, κ APC/Fire[™] 750 isotype control (bottom).

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 µl per million cells in 100 µl staining volume or 5 µl per

100 µl of whole blood.

* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

Application Notes:

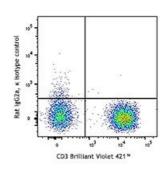
The FIB504 antibody has been reported to react with mouse and human &7 integrin and to block &7 integrin-mediated cell adhesion in in

vitro and in vivo studies. Additional reported applications (for the

reported applications (for the relevant formats) include: blocking of cell adhesion^{1,3,4}. The Ultra-LEAF ™ purified FIB504 antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for

functional assays (Cat. No. 321233-

321238).



Human peripheral blood lymphocytes were stained with anti-human CD3 FITC and anti-human CD279 (PD-1) PE/Fire™ 640 (clone EH12.2H7) (left), or mouse IgG1, κ PE/Fire™ 640 (right).

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 $\beta7$ is a 130 kD glycoprotein also known as integin βp . It is a member of the Ig superfamily. In association with integrin $\alpha4$ or αE chain, $\beta7$ forms $\alpha4/\beta7$ or $\alpha E/\beta7$ heterodimer. $\alpha4/\beta7$ (CD49d/ $\beta7$, 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. $\alpha E/\beta7$ (CD103/ $\beta7$, $\alpha_{IEL}/\beta7$) 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/ $\beta7$ 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. Nautre 372:190.