Product Data Sheet

PE/Dazzle[™] 594 anti-human/mouse integrin β7

Catalog # / Size:	2206130 / 100 tests 2206125 / 25 tests
Clone:	FIB504
Isotype:	Rat IgG2a, к
Reactivity:	Human,Non-human primate
Concentration:	Lot-specific

Applications:

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.

* PE/Dazzle[™] 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application
Notes: The FIB504 antibody has been reported to react with mouse and human β7 integrin and to block β7 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 LEAF[™] purified FIB504 antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 321218).

Description: Integrin β 7 is a 130 kD glycoprotein also known as integin β p. It is a member of the Ig superfamily. In association with integrin α 4 or α E chain, β 7 forms α 4/ β 7 or α E/ β 7 heterodimer. α 4/ β 7 (CD49d/ β 7, LPAM-1) is expressed on the majority of peripheral lymphocytes, on small subsets of thymocytes, and bone marrow progenitors. a4/ β 7 binds to several ligands, VCAM-1, MAdCAM-1 and fibronectin, and is involved in lymphocyte adhesion and some hematopoietic progenitor cells migration. α E/ β 7 (CD103/ β 7, α _{IEL}/ β 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/ β 7 complex is thought to play a role in lymphocyte retention via interaction with its ligand E-Cadherin.