

Biotin anti-human/mouse Integrin $\beta 7$

Catalog # / Size: 321209 / 50 μ g
321210 / 500 μ g

Clone: FIB504

Isotype: Rat IgG2a, κ

Workshop Number: VI 6T-101, VI A024

Immunogen: TK1 cells

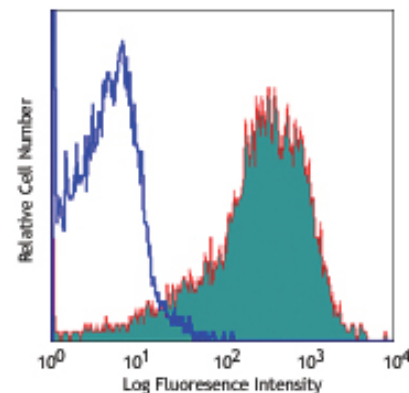
Reactivity: Human, Mouse, **Cross-Reactivity:** Chimpanzee, Baboon, Cynomolgus, Rhesus

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

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. **Do not freeze.**



C57BL/6 mouse splenocytes stained with biotinylated FIB504, followed by Sav-PE

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.25 μ g per million cells in 100 μ l volume. 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^{1,3,4}. The LEAF™ purified FIB504 antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 321218).

Application References:

- Andrew DP, *et al.* 1994. *J. Immunol.* 153:3847. (Block)
- Berlin C, *et al.* 1993. *Cell* 74:185.
- Rott LS, *et al.* 1996. *J. Immunol.* 156:3727. (Block)
- Rivera-Nieves J, *et al.* 2005. *J. Immunol.* 174:2343. (Block)
- Ohmori K, *et al.* 2009. *J. Immunol.* 182:2835. PubMed
- 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:

- Andrew DP, *et al.* 1994. *J. Immunol.* 153:3847.
- Picarella D, *et al.* 1997. *J. Immunol.* 158:2099.
- Lefrancois L, *et al.* 1994. *Eur. J. Immunol.* 24:635
- Cepek KL, *et al.* 1994. *Nature* 372:190.

Related Products:	Product	Clone	Application
	APC Streptavidin		FC, ICFC
	APC/Cy7 Streptavidin		FC, ICFC
	FITC Streptavidin		FC, ICFC
	PE Streptavidin		FC, ICFC
	PE/Cy5 Streptavidin		FC, ICFC
	PE/Cy7 Streptavidin		FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	Biotin Rat IgG2a, κ Isotype Ctrl	RTK2758	FC, ICFC
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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