

# Integrin beta 7 Monoclonal Antibody (FIB504), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	FIB504
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_953646

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	2 Publications
Functional Assay (Functional)	Assay-Dependent	1 Publication

## Product Specific Information

Description: The FIB504 monoclonal antibody reacts with human and mouse integrin beta 7. Integrin beta 7 is a 130 kD glycoprotein which associates with integrin alpha 4 (CD49d) to form the alpha 4 beta 7 integrin LPAM-1, expressed on intraepithelial lymphocytes. It also associates with alpha E (CD103) to form the alpha E beta 7 integrin HML-1, expressed on T cells adjacent to mucosal epithelium and intraepithelial lymphocytes. Main ligands for integrin alpha 4 beta 7 include VCAM-1 (CD106), MAdCAM-1 and fibronectin, while the main ligand of integrin alpha E beta 7 is E-cadherin (CD324). Integrin beta 7 plays an important role in the adhesion of leukocytes to endothelial cells promoting the transmigration of leukocytes to extravascular spaces during the inflammatory response. The FIB504 antibody has been reported to have blocking activity.<sup>^M</sup><sup>^M</sup>

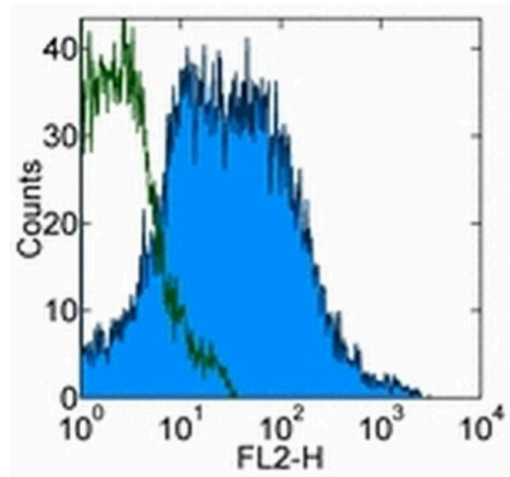
Applications Reported: This FIB504 antibody has been reported for use in flow cytometric analysis and functional assays.<sup>^M</sup><sup>^M</sup>

Applications Tested: This FIB504 antibody has been tested by flow cytometric analysis of human peripheral blood cells. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.<sup>^M</sup><sup>^M</sup>

Purity: Greater than 90%, as determined by SDS-PAGE.<sup>^M</sup><sup>^M</sup>

Aggregation: Less than 10%, as determined by HPLC.<sup>^M</sup><sup>^M</sup>

Filtration: 0.2 µm post-manufacturing filtered.



**Integrin beta 7 Antibody (14-5867-82) in Flow**  
Staining of normal human peripheral blood cells with 0.06 µg of Rat IgG2a K Isotype Control Purified (Product # 14-4321-82) (open histogram) or 0.06 µg of Anti-Human/Mouse Integrin 7 Purified (filled histogram) followed by F (ab')<sub>2</sub> Anti-Rat IgG PE (Product # 12-4822). Cells in the lymphocyte gate were used for analysis.

3 References

Flow Cytometry (2)

iScience	Year 2023
<b>Multimodal cartography of human lymphopoiesis reveals B and T/NK /ILC lineages are subjected to differential regulation.</b>	
"Published figure using Integrin beta 7 monoclonal antibody (Product # 14-5867-82) in Flow Cytometry"	
Authors: Alhaj Hussien K,Chabaane E,Nelson E,Lekishvili S,Diop S,Keita S,Evrard B,Lardenois A,Delord M,Verhoeven E,Cornils K,Kasraian Z,Macintyre EA,Cumano A,Garrick D,Goodhardt M,Andrieu GP,Asnafi V,Chalmel F,Canque B	

Gastroenterology	Year 2011
<b>Characterization of interleukin-17-producing regulatory T cells in inflamed intestinal mucosa from patients with inflammatory bowel diseases.</b>	
"14-5867 was used in Flow cytometry/Cell sorting to investigate how Th17 and Tregs interact under chronic inflammatory conditions."	
Authors: Hovhannisyan Z,Treatman J,Littman DR,Mayer L	

Functional Assay (1)

Nature communications	Year 2016
<b>Protection from septic peritonitis by rapid neutrophil recruitment through omental high endothelial venules.</b>	
"14-5867 was used in Functional assays to elucidate the importance of neutrophil migration through omental high endothelial venules for host defence against early systemic bacterial spread and sepsis."	
Authors: Buscher K,Wang H,Zhang X,Striewski P,Wirth B,Saggu G,Lütke-Enking S,Mayadas TN,Ley K,Sorokin L,Song J	

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