

## Product datasheet

# Anti-Integrin beta 7 antibody [FIB504] (Biotin) ab95816

★★★★★ 1 Abreviews 2 References 3 Images

### Overview

<b>Product name</b>	Anti-Integrin beta 7 antibody [FIB504] (Biotin)
<b>Description</b>	Rat monoclonal [FIB504] to Integrin beta 7 (Biotin)
<b>Host species</b>	Rat
<b>Conjugation</b>	Biotin
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	TK1 murine t-cell lymphoma
<b>Positive control</b>	Normal Human peripheral blood cells

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Aqueous buffer. Preservative: 0.09% Sodium Azide
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	FIB504
<b>Isotype</b>	IgG2a
<b>Light chain type</b>	kappa

### Applications

Our [Abpromise guarantee](#) covers the use of **ab95816** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★	1/300.

Application	Abreviews	Notes
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Flow Cyt

Use 0.125µg for 10<sup>5</sup> cells.

Range from 105 to 108 cells/test in a final volume of 100 &microl.

[ab18445](#) - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

## Target

### Function

Integrin alpha-4/beta-7 (Peyer patches-specific homing receptor LPAM-1) is an adhesion molecule that mediates lymphocyte migration and homing to gut-associated lymphoid tissue (GALT). Integrin alpha-4/beta-7 interacts with the cell surface adhesion molecules MADCAM1 which is normally expressed by the vascular endothelium of the gastrointestinal tract. Interacts also with VCAM1 and fibronectin, an extracellular matrix component. It recognizes one or more domains within the alternatively spliced CS-1 region of fibronectin. Interactions involves the tripeptide L-D-T in MADCAM1, and L-D-V in fibronectin. Binds to HIV-1 gp120, thereby allowing the virus to enter GALT, which is thought to be the major trigger of AIDS disease. Interaction would involve a tripeptide L-D-I in HIV-1 gp120. Integrin alpha-E/beta-7 (HML-1) is a receptor for E-cadherin.

### Tissue specificity

Expressed in a variety of leukocyte lines.

### Sequence similarities

Belongs to the integrin beta chain family.  
Contains 1 VWFA domain.

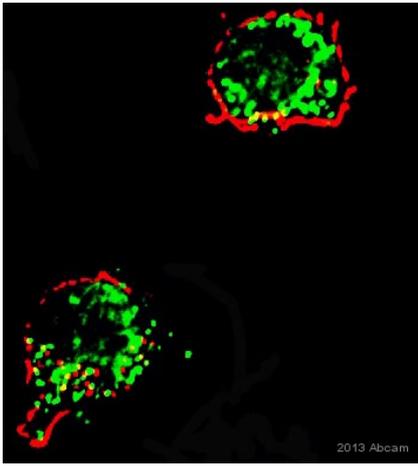
### Domain

Domain I contains three cation-binding sites: the ligand-integrin-binding site (LIMBS), the metal ion-dependent adhesion site (MIDAS), and the adjacent to MIDAS site (ADMIDAS). In the absence of a ligand or in calcium-dependent binding, only ADMIDAS is occupied. In magnesium-dependent binding all three sites bind metal ions. LIMBS positively modify ligand binding whereas ADMIDAS negatively modify ligand binding.

### Cellular localization

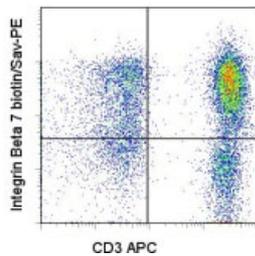
Membrane.

## Images



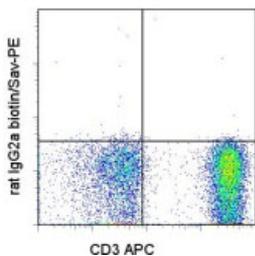
ICC/IF image of Integrin beta 7 staining on RAW264.7 cell line using ab95816 (1:300). The cells were fixed using formaldehyde and permeabilized using 0.2% Triton X-100. The cells were blocked using 10% goat serum for 1 hour at 20°C. The cells were incubated with ab95816 (1:300) for 1 hour at 20°C. The staining was detected using Streptavidin conjugated to Alexo Fluor 647 (1:350)

Immunocytochemistry/ Immunofluorescence - Anti-Integrin beta 7 antibody [FIB504] (Biotin) (ab95816)  
This image is courtesy of an anonymous abreview.



Staining of normal Human peripheral blood cells with 0.06 µg of ab95816 followed by Streptavidin PE. Cells in the lymphocyte gate were used for analysis.

Flow Cytometry - Anti-Integrin beta 7 antibody [FIB504] (Biotin) (ab95816)



Staining of normal Human peripheral blood cells with Anti-Human CD3 APC and 0.125 µg of Rat IgG2a ? Isotype Control Biotin. Cells in the lymphocyte gate were used for analysis.

Flow Cytometry - Anti-Integrin beta 7 antibody [FIB504] (Biotin) (ab95816)

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