

# Integrin beta 7 Rabbit pAb

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Catalog # AP54281

## Product Information

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<b>Application</b>	IHC-P, IHC-F, IF
<b>Primary Accession</b>	<a href="#">P26010</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	86903
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human Integrin beta 7
<b>Epitope Specificity</b>	721-806/806
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Membrane; Single-pass type I membrane protein.
<b>SIMILARITY</b>	Belongs to the integrin beta chain family. Contains 1 VWFA domain.
<b>SUBUNIT</b>	Heterodimer of an alpha and a beta subunit. Beta-7 associates with either alpha-4 or alpha-E. Integrin alpha-4/beta-7 interacts with MADCAM1, VCAM, fibronectin, and may also interact with HIV-1 gp120.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	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.

## Additional Information

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<b>Gene ID</b>	3695
<b>Other Names</b>	Integrin beta-7, Gut homing receptor beta subunit, ITGB7
<b>Target/Specificity</b>	Expressed in a variety of leukocyte lines.

<b>Dilution</b>	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

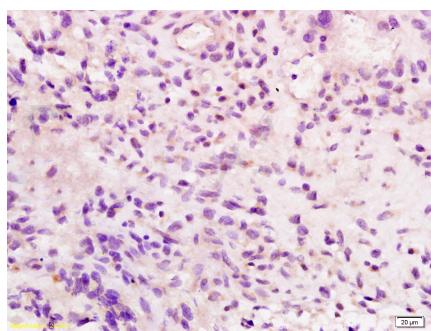
## Protein Information

<b>Name</b>	ITGB7
<b>Function</b>	Integrin ITGA4/ITGB7 (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) (Probable). Integrin ITGA4/ITGB7 interacts with the cell surface adhesion molecules MADCAM1 which is normally expressed by the vascular endothelium of the gastrointestinal tract (PubMed: <a href="#">10837471</a> , PubMed: <a href="#">14608374</a> ). Also interacts with VCAM1 and fibronectin, an extracellular matrix component (Probable). It recognizes one or more domains within the alternatively spliced CS-1 region of fibronectin (Probable). Interactions involve the tripeptide L-D-T in MADCAM1, and L-D-V in fibronectin (Probable). Integrin ITGAE/ITGB7 (alpha-E/beta-7, HML-1) is a receptor for E-cadherin (PubMed: <a href="#">10837471</a> ).
<b>Cellular Location</b>	Cell membrane; Single-pass type I membrane protein
<b>Tissue Location</b>	Expressed in a variety of leukocyte lines.

## Background

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.

## Images



Tissue/cell: human glioma tissue; 4%  
 Paraformaldehyde-fixed and paraffin-embedded;  
 Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling  
 bathing for 15min; Block endogenous peroxidase by 3%  
 Hydrogen peroxide for 30min; Blocking buffer (normal  
 goat serum,C-0005) at 37°C for 20 min;  
 Incubation: Anti-Integrin beta 7 Polyclonal Antibody,  
 Unconjugated(AP54281) 1:200, overnight at 4°C, followed  
 by conjugation to the secondary antibody(SP-0023) and  
 DAB(C-0010) staining