

Integrin beta 7 Rabbit pAb

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Catalog # AP54281

Product Information

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

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

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	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.

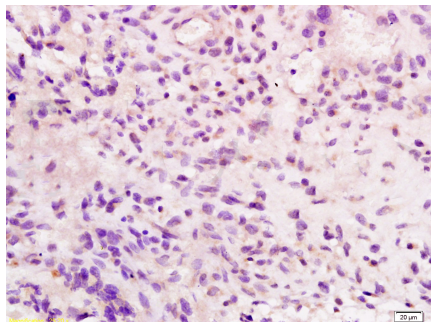
Protein Information

Name	ITGB7
Function	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: 10837471 , PubMed: 14608374). 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: 10837471).
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	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