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ITGB7 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP16093b

Specification

ITGB7 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P26010

ITGB7 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 3695

Other Names
Integrin beta-7, Gut homing receptor beta subunit, ITGB7

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ITGB7 Antibody (C-term) Blocking Peptide - 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). Interacts also 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.

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ITGB7 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

ITGB7 Antibody (C-term) Blocking Peptide - Images

ITGB7 Antibody (C-term) Blocking Peptide - 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.

ITGB7 Antibody (C-term) Blocking Peptide - References

Cicala, C., et al. Proc. Natl. Acad. Sci. U.S.A. 106(49):20877-20882(2009)Pentikainen, U., et al. J. Mol. Biol. 393(3):644-657(2009)Lad, Y., et al. J. Biol. Chem. 283(50):35154-35163(2008)Monteiro, P., et al. Biochem. Biophys. Res. Commun. 358(2):442-448(2007)Le Floc'h, A., et al. J. Exp. Med. 204(3):559-570(2007)