Product datasheet

Anti-Integrin beta 7 antibody [FIB504] (FITC) ab95818

Overview

Product name: Anti-Integrin beta 7 antibody [FIB504] (FITC)
Description: Rat monoclonal [FIB504] to Integrin beta 7 (FITC)
Host species: Rat
Conjugation: FITC. Ex: 493nm, Em: 528nm
Tested applications: Suitable for: Flow Cyt
Species reactivity: Reacts with: Mouse, Human
Immunogen: TK1 murine t-cell lymphoma
Positive control: Normal Human peripheral blood cells

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at +4°C.
Storage buffer: Preservative: 0.09% Sodium Azide
Constituents: PBS, pH 7.2
Purity: Protein G purified
Clonality: Monoclonal
Clone number: FIB504
Isotype: IgG2a
Light chain type: kappa

Applications

Our Abpromise guarantee covers the use of ab95818 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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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.

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

Staining of normal Human peripheral blood cells with Rat IgG2a ? Isotype Control FITC (open histogram) or ab95818 (filled histogram). Cells in the lymphocyte gate were used for analysis.

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