abcam

Product datasheet

Anti-Integrin beta 7 antibody [EP5948] - BSA and Azide free ab216688



3 Images

Overview

Product name Anti-Integrin beta 7 antibody [EP5948] - BSA and Azide free

Description Rabbit monoclonal [EP5948] to Integrin beta 7 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IP, WB

Unsuitable for: Flow Cyt,ICC/IF or IHC-P

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: IM-9 cell lysate. IP: IM-9 whole cell lysate.

General notes ab216688 is the carrier-free version of ab137058.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EP5948

Isotype IgG

Applications

The Abpromise quarantee Our Abpromise quarantee covers the use of ab216688 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
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 87 kDa.

Application notes Is unsuitable for Flow Cyt,ICC/IF or IHC-P.

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.

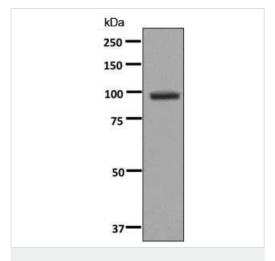
Domain Domain I contains three cation-binding sites: the ligand-integrin-binding site (LIMBS), the metal

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



Western blot - Anti-Integrin beta 7 antibody [EP5948] - BSA and Azide free (ab216688)

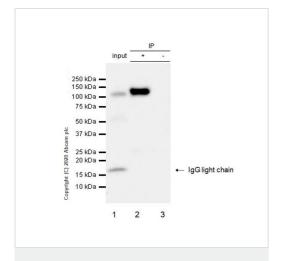
Anti-Integrin beta 7 antibody [EP5948] (ab137058) at 1/1000 dilution + IM-9 cell lysate at 10 μg

Secondary

HRP labeled Goat anti-Rabbit lgG at 1/2000 dilution

Predicted band size: 87 kDa

This data was developed using <u>ab137058</u>, the same antibody clone in a different buffer formulation.



Immunoprecipitation - Anti-Integrin beta 7 antibody [EP5948] - BSA and Azide free (ab216688)

This data was developed using <u>ab137058</u>, the same antibody clone in a different buffer formulation.

purified ab 137058 at 1/50 dilution ($2\mu g$) immunoprecipitating Integrin beta 7 in IM-9 whole cell lysate.

Lane 1 (input): IM-9 (Human multiple myeloma B Lymphoblast) whole cell lysate 10µg

Lane 2 (+): <u>ab137058</u> + IM-9 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab137058 in IM-9 whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 100-120 kDa



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