abcam

Product datasheet

Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free ab271936



リコンピナント

RabMAb

**** 1 Abreviews 1 References 画像数 10

製品の概要

製品名 Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR17338] to Integrin alpha 2 - BSA and Azide free

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), ICC/IF, WB, IHC-P, IP

種交差性 交差種: Mouse, Rat, Human

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

ポジティブ・コントロール IHC-P: Human colon, human squamous cell carcinoma of cervix, mouse kidney and rat colon

tissues. ICC/IF: Wild-type HAP1, PC-3 and MCF7 cells. Flow Cyt (intra): A549 cells. IP: T-47D

whole cell extract.

特記事項 ab271936 is the carrier-free version of ab181548.

Our <u>carrier-free</u> 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 cell-based 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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリモノ モノクローナル **クローン名** EPR17338

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab271936の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use at an assay dependent concentration. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration. This product gave a positive signal in wild-type HAP1 cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).
WB		Use at an assay dependent concentration. Predicted molecular weight: 129 kDa.
IHC-P	*** <u>*</u>	Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

ターゲット情報

機能 Integrin alpha-2/beta-1 is a receptor for laminin, collagen, collagen C-propeptides, fibronectin and

E-cadherin. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen. It is responsible for adhesion of platelets and other cells to collagens, modulation of collagen and collagenase gene expression, force generation and organization of newly synthesized

extracellular matrix.

配列類似性 Belongs to the integrin alpha chain family.

Contains 7 FG-GAP repeats.

Contains 1 VWFA domain.

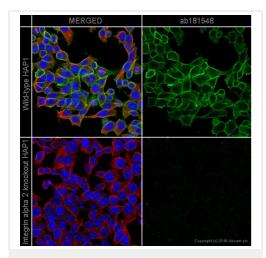
ドメイン

The integrin I-domain (insert) is a VWFA domain. Integrins with I-domains do not undergo protease cleavage.

細胞内局在

Membrane.

画像



Immunocytochemistry/ Immunofluorescence - Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free (ab271936)

ab181548 staining Integrin α2 in wild-type HAP1 cells (top panel) and Integrin α2 knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with **ab181548** at 1μg/ml concentration and **ab7291** at 1μg/ml concentration overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit lgG (Alexa Fluor® 488) (**ab150081**) at 2 μg/ml (shown in green) and a goat secondary antibody to Mouse lgG (Alexa Fluor® 594) (**ab150120**) at 2μg/ml (shown in pseudo-color red). Nuclear DNA was labelled in blue with DAPI. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab181548</u>).

ab181548 MERGED

DAPI -ve control 1 -ve control 2

Immunocytochemistry/ Immunofluorescence - Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free (ab271936)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF7 (Human breast adenocarcinoma cell line) cells labeling integrin alpha 2 with ab181548 at 1/100 dilution, followed by Goat anti-rabbit IAlexa Fluor® 488 (lgG) (ab150077) secondary antibody at 1/400 dilution (green). Confocal image showing membrane staining on MCF7 cell line is observed. The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/500 dilution and ab150120 (goat anti-mouse AlexaFluor®594 secondary antibody) at 1/500 dilution (red).

The negative controls are as follows:-

-ve control 1 - <u>ab181548</u> at 1/100 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
-ve control 2. - <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/500 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/400 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and

sodium azide (ab181548).

ab181548 MERGED

DAPI -ve control 1 -ve control 2

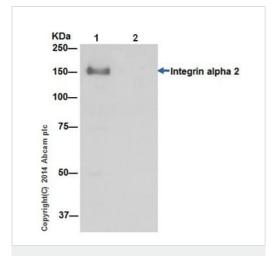
Immunocytochemistry/ Immunofluorescence - Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free (ab271936)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized PC-3 (Human prostate adenocarcinoma cell line) cells labeling integrin alpha 2 with ab181548 at 1/100 dilution, followed by Goat anti-rabbit IAlexa Fluor® 488 (IgG) (ab150077) secondary antibody at 1/400 dilution (green). Confocal image showing membrane and weakly cytoplasmic staining on PC-3 cell line is observed. The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/500 dilution and ab150120 (goat anti-mouse AlexaFluor®594 secondary antibody) at 1/500 dilution (red).

The negative controls are as follows:-

-ve control 1 - <u>ab181548</u> at 1/100 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
-ve control 2. - <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/500 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/400 dilution.

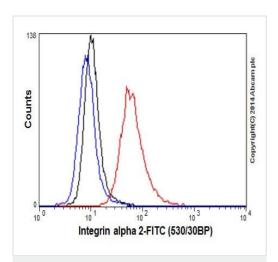
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab181548</u>).



Immunoprecipitation - Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free (ab271936)

Integrin alpha 2 was immunoprecipitated from 1mg of T-47D (Human ductal breast epithelial tumor cell line) whole cell extract with <u>ab181548</u> at 1/150 dilution. Western blot was performed using <u>ab181548</u> at 1/20,000 dilution. Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG, was used as secondary antibody at 1/1500 dilution. Lane 1: T-47D whole cell extract Lane 2: PBS instead of T-47D whole cell extract.

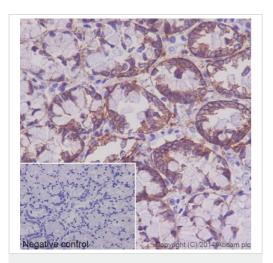
Blocking and dilution buffer and concentration: 5% NFDM/TBST. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab181548).



Flow Cytometry (Intracellular) - Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free (ab271936)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed A549 (Human lung carcinoma) cells labeling integrin alpha 2 with **ab181549** at 1/160 dilution (red) compared with a rabbit monoclonal lgG isotype control (black) and a unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit lgG (FITC) at 1/150 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab181548).



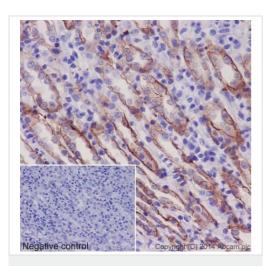
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free (ab271936)

Immunohistochemical analysis of paraffin-embedded Rat colon tissue labeling Integrin alpha 2 with <u>ab181548</u> at 1/500 dilution followed by Goat <u>Anti-Rabbit HRP</u> (IgG H&L) (<u>ab97051</u>) at 1/500 dilution. Membrane staining on epithelial cells of Rat colon tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab181548</u>).



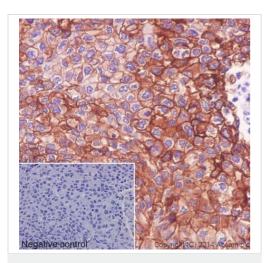
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free (ab271936)

Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling Integrin alpha 2 with ab181548 at 1/500 dilution followed by Goat Anti-Rabbit HRP (IgG H&L) (ab97051) at 1/500 dilution. Membrane and weak cytoplasmic staining on epithelial cells of Mouse kidney tubule is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab181548</u>).



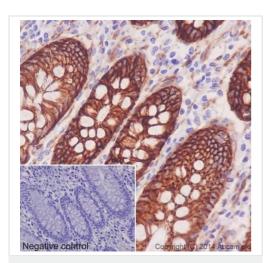
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free (ab271936)

Immunohistochemical analysis of paraffin-embedded Human squamous cell carcinoma of cervix tissue labeling Integrin alpha 2 with ab181548 at 1/500 dilution followed by Goat Anti-Rabbit HRP (IgG H&L) (ab97051) at 1/500 dilution. Membrane and weak cytoplasmic staining on epithelial cells of human squamous cell carcinoma of cervix tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab181548).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin alpha 2 antibody [EPR17338] - BSA and Azide free (ab271936)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling Integrin alpha 2 with <u>ab181548</u> at 1/500 dilution followed by Goat <u>Anti-Rabbit HRP</u> (IgG H&L) (<u>ab97051</u>) at 1/500 dilution. Membrane and weak cytoplasmic staining on epithelial cells of human colon is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab181548).



and Azide free (ab271936)

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