


Anti-Integrin beta 1 antibody ab183666

★★★★☆ **3 Abreviews** **22 References** **画像数 8**

製品の概要

製品名	Anti-Integrin beta 1 antibody
製品の詳細	Rabbit polyclonal to Integrin beta 1
由来種	Rabbit
アプリケーション	適用あり: IP, IHC-P, WB
種交差性	交差種: Mouse, Rat, Human 交差が予測される動物種: Pig 
免疫原	Synthetic peptide within Human Integrin beta 1 aa 738-798. The exact sequence is proprietary. Database link: P05556
ポジティブ・コントロール	A431, HeLa, U87-MG, SK-N-SH, IMR32, SK-N-AS, Neuro2A, GL261, C8D30, NIH-3T3, BCL-1, Raw264.7, C2C12, PC12 and Rat-2 whole cell lysates/extracts. Human reast carcinoma and hepatoma tissue.
特記事項	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab183666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
IP		Use at an assay dependent concentration.
IHC-P	★☆☆☆☆ (1)	1/100 - 1/1000.
WB	★★★★★ (1)	1/5000 - 1/10000. Predicted molecular weight: 88 kDa.

ターゲット情報

機能

Integrins alpha-1/beta-1, alpha-2/beta-1, alpha-10/beta-1 and alpha-11/beta-1 are receptors for collagen. Integrins alpha-1/beta-1 and alpha-2/beta-2 recognize the proline-hydroxylated sequence G-F-P-G-E-R in collagen. Integrins alpha-2/beta-1, alpha-3/beta-1, alpha-4/beta-1, alpha-5/beta-1, alpha-8/beta-1, alpha-10/beta-1, alpha-11/beta-1 and alpha-V/beta-1 are receptors for fibronectin. Alpha-4/beta-1 recognizes one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. Integrin alpha-5/beta-1 is a receptor for fibrinogen. Integrin alpha-1/beta-1, alpha-2/beta-1, alpha-6/beta-1 and alpha-7/beta-1 are receptors for laminin. Integrin alpha-4/beta-1 is a receptor for VCAM1. It recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-9/beta-1 is a receptor for VCAM1, cytotactin and osteopontin. It recognizes the sequence A-E-I-D-G-I-E-L in cytotactin. Integrin alpha-3/beta-1 is a receptor for epiligrin, thrombospondin and CSPG4. Alpha-3/beta-1 may mediate with LGALS3 the stimulation by CSPG4 of endothelial cells migration. Integrin alpha-V/beta-1 is a receptor for vitronectin. Beta-1 integrins recognize the sequence R-G-D in a wide array of ligands. Isoform 2 interferes with isoform 1 resulting in a dominant negative effect on cell adhesion and migration (in vitro). When associated with alpha-7/beta-1 integrin, regulates cell adhesion and laminin matrix deposition. Involved in promoting endothelial cell motility and angiogenesis. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process and the formation of mineralized bone nodules. May be involved in up-regulation of the activity of kinases such as PKC via binding to KRT1. Together with KRT1 and RACK1, serves as a platform for SRC activation or inactivation. Plays a mechanistic adhesive role during telophase, required for the successful completion of cytokinesis. Integrin alpha-3/beta-1 provides a docking site for FAP (seprase) at invadopodia plasma membranes in a collagen-dependent manner and hence may participate in the adhesion, formation of invadopodia and matrix degradation processes, promoting cell invasion. ITGA4:ITGB1 binds to fractalkine (CX3CL1) and may act as its coreceptor in CX3CR1-dependent fractalkine signaling (PubMed:23125415, PubMed:24789099). ITGA4:ITGB1 and ITGA5:ITGB1 bind to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1 (PubMed:18635536, PubMed:25398877). ITGA5:ITGB1 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed:12807887, PubMed:17158881). Isoform 5: Isoform 5 displaces isoform 1 in striated muscles. (Microbial infection) Integrin ITGA2:ITGB1 acts as a receptor for human echoviruses 1 and 8 (PubMed:8411387). Acts as a receptor for cytomegalovirus/HHV-5 (PubMed:20660204). Acts as a receptor for Epstein-Barr virus/HHV-4 (PubMed:17945327). Integrin ITGA5:ITGB1 acts as a receptor for human parvovirus B19 (PubMed:12907437). Integrin ITGA2:ITGB1 acts as a receptor

for human rotavirus (PubMed:12941907). Acts as a receptor for mammalian reovirus (PubMed:16501085). In case of HIV-1 infection, integrin ITGA5:ITGB1 binding to extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions (PubMed:10397733).

組織特異性

Isoform 1 is widely expressed, other isoforms are generally coexpressed with a more restricted distribution. Isoform 2 is expressed in skin, liver, skeletal muscle, cardiac muscle, placenta, umbilical vein endothelial cells, neuroblastoma cells, lymphoma cells, hepatoma cells and astrocytoma cells. Isoform 3 and isoform 4 are expressed in muscle, kidney, liver, placenta, cervical epithelium, umbilical vein endothelial cells, fibroblast cells, embryonal kidney cells, platelets and several blood cell lines. Isoform 4, rather than isoform 3, is selectively expressed in peripheral T-cells. Isoform 3 is expressed in non-proliferating and differentiated prostate gland epithelial cells and in platelets, on the surface of erythroleukemia cells and in various hematopoietic cell lines. Isoform 5 is expressed specifically in striated muscle (skeletal and cardiac muscle).

配列類似性

Belongs to the integrin beta chain family.

Contains 1 VWFA domain.

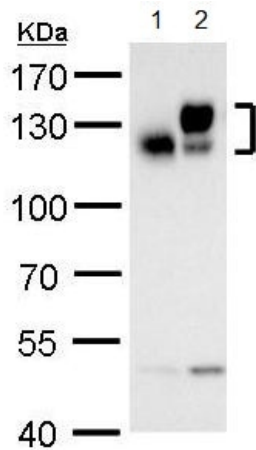
翻訳後修飾

The cysteine residues are involved in intrachain disulfide bonds.

細胞内局在

Cell membrane, sarcolemma. Cell junction. In cardiac muscle, isoform 5 is found in costameres and intercalated disks and Cell membrane. Cell projection, invadopodium membrane. Cell projection, ruffle membrane. Recycling endosome. Melanosome. Cleavage furrow. Cell projection, lamellipodium. Cell projection, ruffle. Cell junction, focal adhesion. Cell surface. Isoform 2 does not localize to focal adhesions. Highly enriched in stage I melanosomes. Located on plasma membrane of neuroblastoma NMB7 cells. In a lung cancer cell line, in prometaphase and metaphase, localizes diffusely at the membrane and in a few intracellular vesicles. In early telophase, detected mainly on the matrix-facing side of the cells. By mid-telophase, concentrated to the ingressing cleavage furrow, mainly to the basal side of the furrow. In late telophase, concentrated to the extending protrusions formed at the opposite ends of the spreading daughter cells, in vesicles at the base of the lamellipodia formed by the separating daughter cells. Colocalizes with ITGB1BP1 and metastatic suppressor protein NME2 at the edge or peripheral ruffles and lamellipodia during the early stages of cell spreading on fibronectin or collagen. Translocates from peripheral focal adhesions sites to fibrillar adhesions in a ITGB1BP1-dependent manner. Enriched preferentially at invadopodia, cell membrane protrusions that correspond to sites of cell invasion, in a collagen-dependent manner. Localized at plasma and ruffle membranes in a collagen-independent manner.

画像



Western blot - Anti-Integrin beta 1 antibody (ab183666)

All lanes : Anti-Integrin beta 1 antibody (ab183666) at 1/10000 dilution

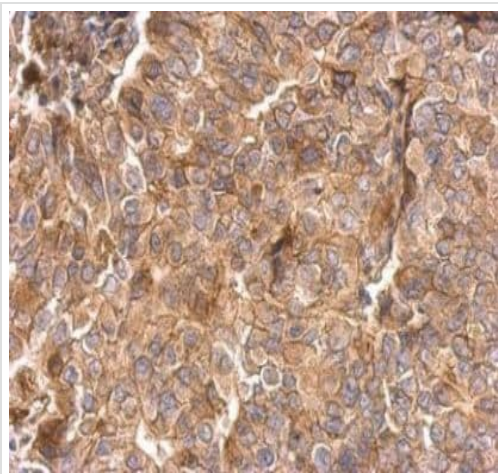
Lane 1 : A431 whole cell lysate/extract

Lane 2 : HeLa whole cell lysate/extract

Lysates/proteins at 30 µg per lane.

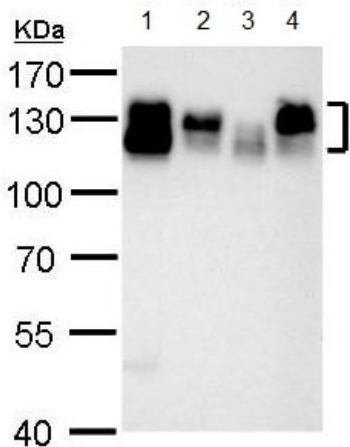
Predicted band size: 88 kDa

7.5 % SDS-PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Integrin beta 1 antibody (ab183666)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue labeling Integrin beta 1 with ab183666 at 1/500 dilution.



Western blot - Anti-Integrin beta 1 antibody (ab183666)

All lanes : Anti-Integrin beta 1 antibody (ab183666) at 1/10000 dilution

Lane 1 : U87-MG whole cell lysate/extract

Lane 2 : SK-N-SH whole cell lysate/extract

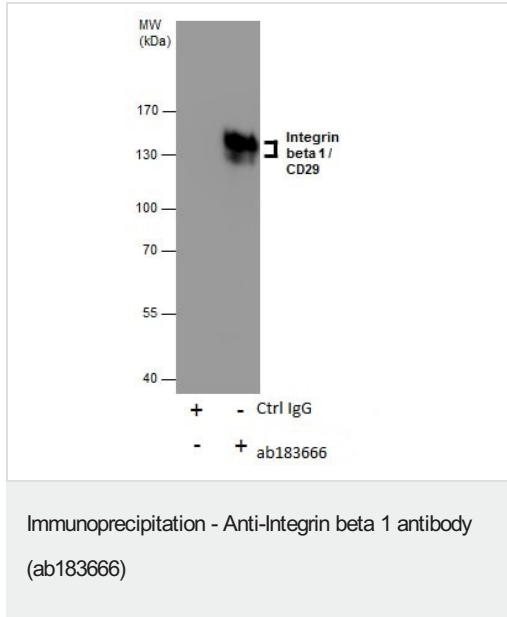
Lane 3 : IMR32 whole cell lysate/extract

Lane 4 : SK-N-AS whole cell lysate/extract

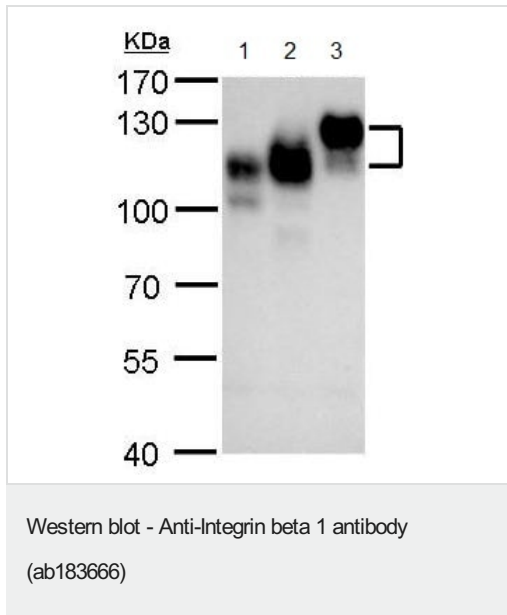
Lysates/proteins at 30 µg per lane.

Predicted band size: 88 kDa

7.5 % SDS-PAGE



ab183666 at 5µg immunoprecipitating Integrin beta 1 in HeLa whole cell extracts.



All lanes : Anti-Integrin beta 1 antibody (ab183666) at 1/5000 dilution

Lane 1 : Neuro2A whole cell lysate/extract

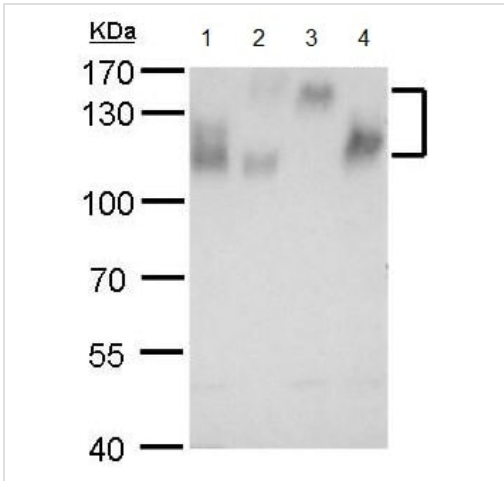
Lane 2 : GL261 whole cell lysate/extract

Lane 3 : C8D30 whole cell lysate/extract

Lysates/proteins at 30 µg per lane.

Predicted band size: 88 kDa

7.5 % SDS-PAGE



Western blot - Anti-Integrin beta 1 antibody (ab183666)

All lanes : Anti-Integrin beta 1 antibody (ab183666) at 1/5000 dilution

Lane 1 : NIH-3T3 whole cell lysate/extract

Lane 2 : BCL-1 whole cell lysate/extract

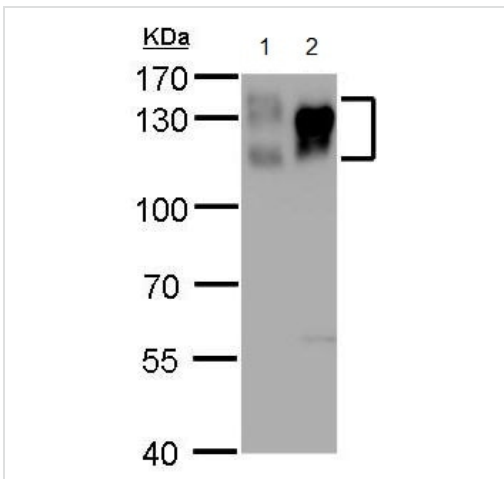
Lane 3 : Raw264.7 whole cell lysate/extract

Lane 4 : C2C12 whole cell lysate/extract

Lysates/proteins at 30 µg per lane.

Predicted band size: 88 kDa

7.5 % SDS-PAGE



Western blot - Anti-Integrin beta 1 antibody (ab183666)

All lanes : Anti-Integrin beta 1 antibody (ab183666) at 1/5000 dilution

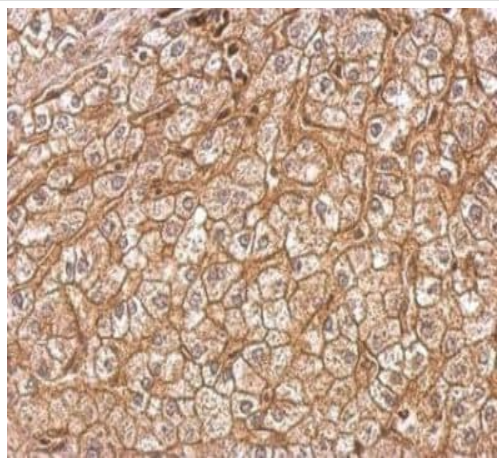
Lane 1 : PC-12 whole cell lysate/extract

Lane 2 : Rat-2 whole cell lysate/extract

Lysates/proteins at 30 µg per lane.

Predicted band size: 88 kDa

7.5 % SDS-PAGE



Immunohistochemical analysis of paraffin-embedded human Hepatoma tissue labeling Integrin beta 1 with ab183666 at 1/500 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Integrin beta 1 antibody (ab183666)

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