

Product datasheet

Anti-Integrin alpha 2 antibody [EPR5788] ab133557

KO VALIDATED Recombinant RabMAB

★★★★★ [5 Abreviews](#) [51 References](#) [9 Images](#)

Overview

Product name	Anti-Integrin alpha 2 antibody [EPR5788]
Description	Rabbit monoclonal [EPR5788] to Integrin alpha 2
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt (Intra) or ICC/IF
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide within Human Integrin alpha 2 aa 1-100 (extracellular). The exact sequence is proprietary.
Positive control	WB: T47-D, HEK293, 293T and A431 cell lysates. Human placenta and mouse spleen tissue lysates. IHC-P: Human breast carcinoma and colon tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 3.20 x 10 ⁻¹² M





[Learn more about \$K_D\$](#)

Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5788
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133557 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

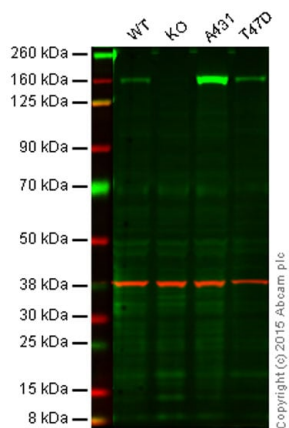
Application	Abreviews	Notes
WB		1/10000 - 1/50000. Detects a band of approximately 150 kDa (predicted molecular weight: 129 kDa).
IHC-P	★★★★★ (3)	1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols .

Application notes Is unsuitable for Flow Cyt (Intra) or ICC/IF.

Target

Function	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.
Sequence similarities	Belongs to the integrin alpha chain family. Contains 7 FG-GAP repeats. Contains 1 VWFA domain.
Domain	The integrin I-domain (insert) is a VWFA domain. Integrins with I-domains do not undergo protease cleavage.
Cellular localization	Membrane.

Images



Western blot - Anti-Integrin alpha 2 antibody [EPR5788] (ab133557)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

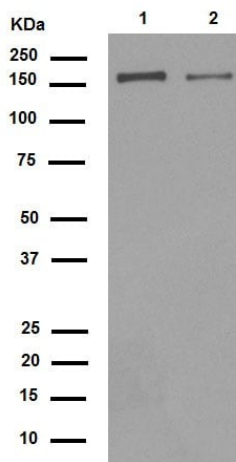
Lane 2: Integrin alpha 2 knockout HAP1 cell lysate (20 µg)

Lane 3: A431 cell lysate (20 µg)

Lane 4: T47D cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab133557 observed at 165 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab133557 was shown to specifically react with Integrin alpha 2 when Integrin alpha 2 knockout samples were used. Wild-type and Integrin alpha 2 knockout samples were subjected to SDS-PAGE. ab133557 and **ab8245** (loading control to GAPDH) were diluted 1/10 000 and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10,000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-Integrin alpha 2 antibody [EPR5788] (ab133557)

All lanes : Anti-Integrin alpha 2 antibody [EPR5788] (ab133557) at 1/10000 dilution (purified)

Lane 1 : T47-D cell lysate

Lane 2 : HEK293 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

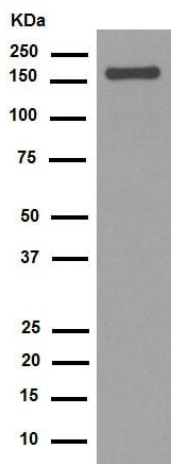
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 129 kDa

Observed band size: 150 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-Integrin alpha 2 antibody
[EPR5788] (ab133557)

Anti-Integrin alpha 2 antibody [EPR5788] (ab133557) at 1/50000
dilution (purified) + A431 cell lysate at 20 μ g

Secondary

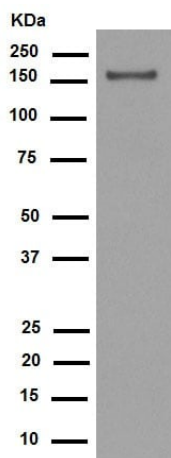
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 129 kDa

Observed band size: 150 kDa

Blocking buffer and concentration: 5% NFDN/TBST.

Diluting buffer and concentration: 5% NFDN /TBST.



Western blot - Anti-Integrin alpha 2 antibody
[EPR5788] (ab133557)

Anti-Integrin alpha 2 antibody [EPR5788] (ab133557) at 1/10000
dilution (purified) + Mouse spleen tissue lysate at 20 μ g

Secondary

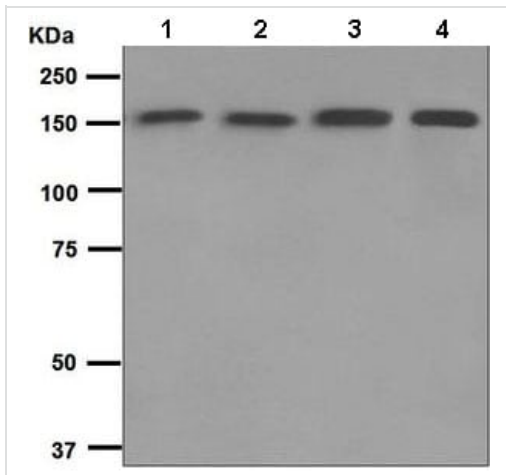
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 129 kDa

Observed band size: 150 kDa

Blocking buffer and concentration: 5% NFDN/TBST.

Diluting buffer and concentration: 5% NFDN /TBST.



Western blot - Anti-Integrin alpha 2 antibody [EPR5788] (ab133557)

All lanes : Anti-Integrin alpha 2 antibody [EPR5788] (ab133557) at 1/10000 dilution (unpurified)

Lane 1 : T47D lysate

Lane 2 : 293T lysate

Lane 3 : Human platelet lysate

Lane 4 : A431 lysate

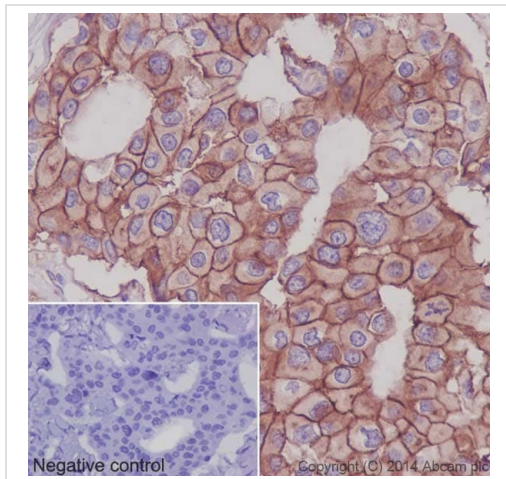
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 129 kDa

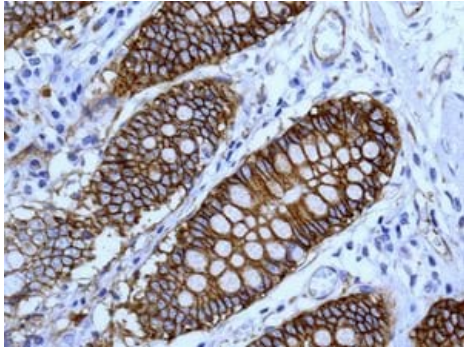
Observed band size: 150 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Integrin alpha 2 antibody [EPR5788] (ab133557)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling Integrin alpha 2 with purified ab133557 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.

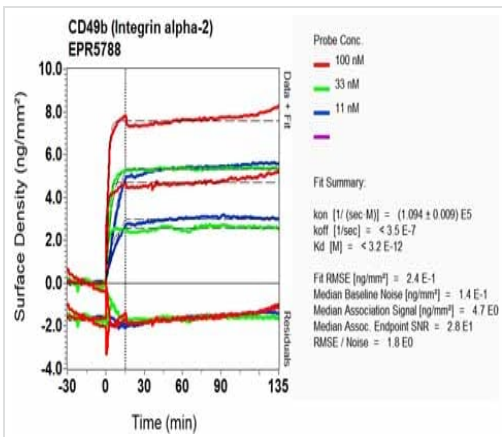
ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Integrin alpha 2 antibody [EPR5788] (ab133557)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue labelling Integrin alpha 2 with unpurified ab133557 at 1/250.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



OI-RD Scanning - Anti-Integrin alpha 2 antibody [EPR5788] (ab133557)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?

- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

Anti-Integrin alpha 2 antibody [EPR5788] (ab133557)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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