abcam

Product datasheet

Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker ab53280



リコンピナント

RabMAb

★★★★★ 9 Abreviews 105 References 画像数 22

製品の概要

製品名 Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker

製品の詳細 Rabbit monoclonal [EP1628Y] to Cytokeratin 8 - Cytoskeleton Marker

由来種 Rabbit

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

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 breast adenocarcinona, ovarian carcinoma, breast carcinoima, colon

adenocarcinoma, endometrial carcinoma and thyroid carcinoma tissue; mouse liver tissue; ICC/IF: HT-29 and HeLa cells; WB: HeLa, A431 and HaCaT cell lysates; Human breast cancer

lysates and Mouse colon lysate; Flow Cyt (intra): HeLa cells, NIH/3T3 cells.

特記事項 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**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

製品の特性

製品の状態 Liquid

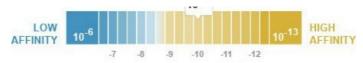
保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

解離定数(K_D 値) $K_D = 4.60 \times 10^{-10} M$

10-10

1



Learn more about K_D

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EP1628Y

アイソタイプ lgG

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ab53280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)		1/20. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB	**** (1)	1/10000. Detects a band of approximately 52 kDa (predicted molecular weight: 54 kDa). For unpurified use at 1/25,000 - 1/50,000.
IP		1/20. For unpurified use at 1:70.
IHC-P	**** <u>(3)</u>	1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	*** <u>*</u>	1/100 - 1/500.
IHC-Fr	★★★★ (1)	Use at an assay dependent concentration.

ターゲット情報

機能 Together with KRT19, helps to link the contractile apparatus to dystrophin at the costameres of

striated muscle.

組織特異性 Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma

membrane in structures that contain dystrophin and spectrin. Expressed in gingival mucosa and

hard palate of the oral cavity.

関連疾患 Cirrhosis

配列類似性 Belongs to the intermediate filament family.

翻訳後修飾 Phosphorylation on serine residues is enhanced during EGF stimulation and mitosis. Ser-74

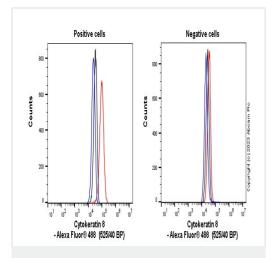
phosphorylation plays an important role in keratin filament reorganization.

O-glycosylated (O-GlcNAcylated), in a cell cycle-dependent manner.

Cytoplasm. Nucleus, nucleoplasm. Nucleus matrix.

細胞内局在

画像



Flow Cytometry (Intracellular) - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) Flow cytometry overlay histogram showing left NIH3T3 positive cells and right negative Raw264.7 stained with ab53280 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab53280) (1x 10^6 in 100μ I at 0.2μ g/mI (1/11500)) for 30min at 22° C.

The secondary antibody Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min at 22°C

Isotype control antibody (black line) was Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.

260 kDa 160 kDa 125 kDa 70 kDa 50 kDa 38 kDa 30 kDa 25 kDa 15 kDa -

Western blot - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) **All lanes :** Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) at 1/10000 dilution

Lane 1: A431 cell lysate

Lane 2: MCF7 cell lysate

Lane 3: Wild-type HeLa cell lysate

Lane 4: KRT8 knockout HeLa cell lysate

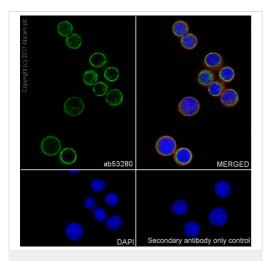
Lysates/proteins at 20 µg per lane.

Predicted band size: 54 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab53280 observed at 55 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab53280 was shown to react with Cytokeratin 8 in wild-type HeLa

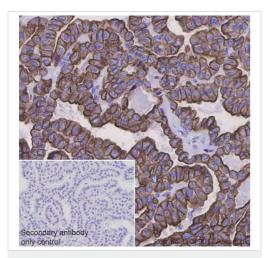
cells. Loss of signal was observed when knockout cell line ab255400 (knockout cell lysate ab263785) was used. Wild-type and Cytokeratin 8 knockout samples were subjected to SDS-PAGE. ab53280 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 10000 (For unpurified use at 1/25,000 - 1/50,000) dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280)

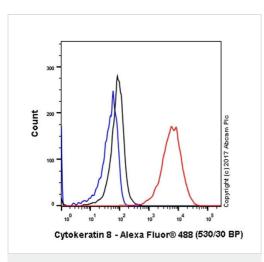
Immunocytochemistry/ Immunofluorescence analysis of HT-29 (Human colorectal adenocarcinoma epithelial cell) cells labeling Cytokeratin 9 with Purified ab53280 at 1:500 dilution. Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) 1:200 (2.5 µg/ml). ab150077 Goat anti rabbit lgG(Alexa Fluor[®] 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

Alexa Fluor[®] 488 (<u>ab192467</u>) and Alexa Fluor[®] 647 (<u>ab192468</u>) conjugated versions are available for this clone.

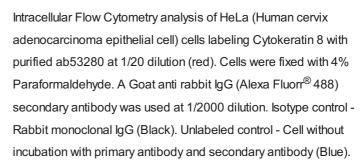


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody
[EP1628Y] - Cytoskeleton Marker (ab53280)

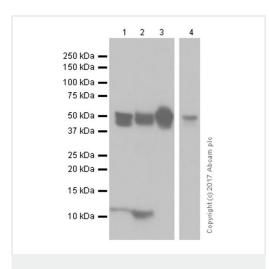
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid carcinoma tissue sections labeling Cytokeratin 8 with Purified ab53280 at 1:250 dilution. Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Flow Cytometry (Intracellular) - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280)



Alexa Fluorr[®]488 (<u>ab192467</u>) and Alexa Fluorr[®]647 (<u>ab192468</u>) conjugated versions are available for this clone.



Western blot - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280)

All lanes : Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) at 1/10000 dilution (purified)

Lane 1: A431 (Human epidermoid carcinoma epithelial cell) whole cell lysates

Lane 2: Human breast cancer lysates

Lane 3: HaCaT (Human skin keratinocyte) whole cell lysates

Lane 4: Mouse colon lysates

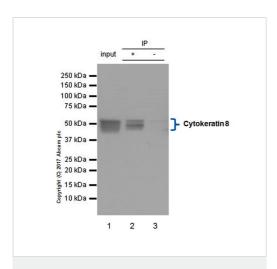
Lysates/proteins at 20 µg per lane.

Secondary

 $\begin{tabular}{ll} \textbf{All lanes:} Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution \end{tabular}$

Predicted band size: 54 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Immunoprecipitation - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) ab53280 (purified) at 1:20 dilution (0.2µg) immunoprecipitating Cytokeratin 8 in HeLa whole cell lysate.

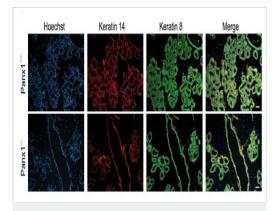
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate, 10µg

Lane 2 (+): ab53280 & HeLa whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab53280 in HeLa whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



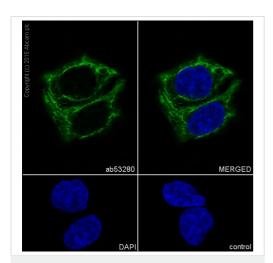
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody
[EP1628Y] - Cytoskeleton Marker (ab53280)

Stewart, MK. et al PLoS One. 2016 Apr 21;11(4):e0154162. doi: 10.1371/journal.pone.0154162. eCollection 2016 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Panx1^{-/-} mice have normal mammary gland epithelial differentiation at lactation

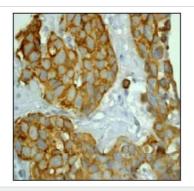
Immunofluorescent analysis of luminal epithelial marker keratin 8 (green) and myoepithelial marker keratin14 (red) revealed a similar staining pattern in Panx1^{-/-} mice compared to control mice during lactation. Paraffin-embedded tissue samples.

Hoescht (blue) denotes nuclei. N = 6. Scale bars = 50 um.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280)

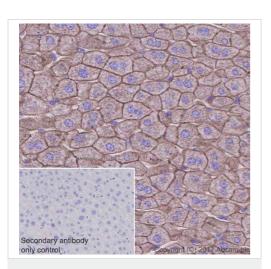
Immunocytochemistry/Immunofluorescence analysis of HeLa (human cervix adenocarcinoma) labelling Cytokeratin 8 with purified ab53280 at 1/500. Cells were fixed with 4% Paraformaldehyde and permeabilised by 0.1% tritonX-100. An Alexa Fluor[®] 488-conjugated goat anti-rabbit lgG (1/1000) was used as the secondary antibody (Ab150077). Nuclei counterstained with DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody

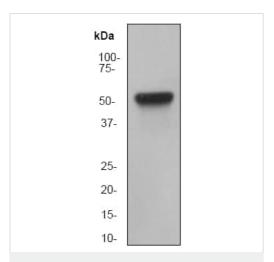
[EP1628Y] - Cytoskeleton Marker (ab53280)

Unpurified ab53280 (1:250) staining human Cyotkeratin 8 in human breast adenocarcinoma tissue by immunohistochemistry using paraffin embedded tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody
[EP1628Y] - Cytoskeleton Marker (ab53280)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue sections labeling Cytokeratin 8 with Purified ab53280 at 1:250 dilution. Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) at 1/50000 dilution (unpurified) + A431 cell lysate at 10 μg

Secondary

Goat anti-Rabbit HRP labeled at 1/2000 dilution

Predicted band size: 54 kDa

Observed band size: 52 kDa

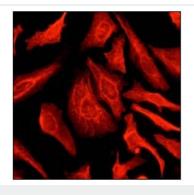


sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formalin and blocked with 10% serum for 20 minutes at 23°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/75 in TBS + 1% BSA) for 1 hour at 23°C. A Biotin-conjugated Goat anti-rabbit IgG polyclonal (1/500) was used as the secondary antibody.

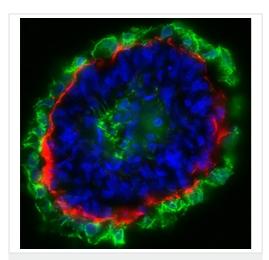
Unpurified ab53280 staining Cytokeratin 8 in Mouse liver tissue

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280)

This image is courtesy of an anonymous Abreview

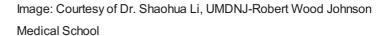


Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) Immunofluorescent staining of HeLa cells using unpurified ab53280 (1:100).



Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280)

This image is courtesy of Dr. Shaohua Li



Sample: mouse embryonic stem cell-differentiated embryoid bodies (EBs)

Preparation:

Fix in 3% PFA in PBS for 30 min at RT Incubate in 7.5% sucrose-PBS for 3h at RT Incubate in 15% sucrose-PBS at 4 degree Celsius overnight Embed the EBs in tissue-Tek OCT compound Cut frozen sections to 4-20 µm thickness

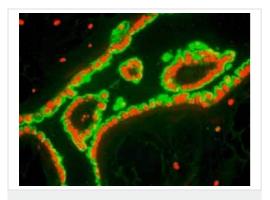
Primary antibody 1: Rabbit anti cytokeratin 8 (unpurified ab53280), 1:100

Primary antibody 2: Rat anti-perlecan, 1:100
Secondary antibody 1: Goat polyclonal Secondary Antibody to
Rabbit lgG - H&L (Alexa Fluor® 488) pre-adsorbed (ab150081),
1:200

Secondary antibody 2: Goat polyclonal Secondary Antibody to Rat lgG - H&L (Cy5®) pre-adsorbed (<u>ab150081</u>), 1:200

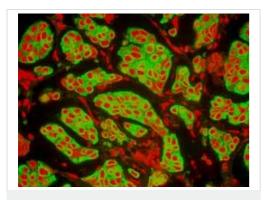
Nuclei were counterstained with DAPI

Fluorescent immunohistochemical analysis of paraffin-embedded human ovarian carcinoma tissue using unpurified ab53280. Green-CK8 red-Pl.



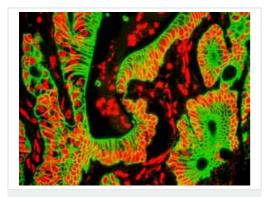
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody

[EP1628Y] - Cytoskeleton Marker (ab53280)



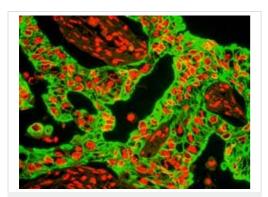
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody
[EP1628Y] - Cytoskeleton Marker (ab53280)

Fluorescent immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using unpurified ab53280. Green-CK8 red-PI



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody
[EP1628Y] - Cytoskeleton Marker (ab53280)

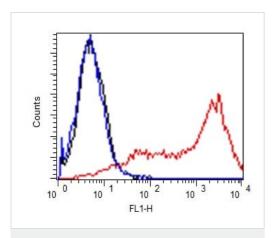
Fluorescent immunohistochemical analysis of paraffin-embedded human colonic adenocarcinoma tissue using unpurified ab53280. Green-CK8 red-PI.



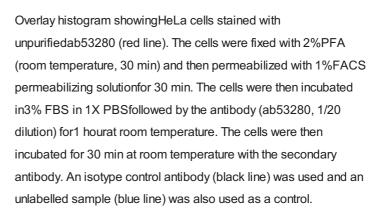
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody

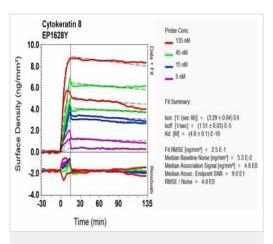
[EP1628Y] - Cytoskeleton Marker (ab53280)

Fluorescent immunohistochemical analysis of paraffin-embedded human endometrial carcinoma tissue using unpurified ab53280. Green-CK8 red-PI.



Flow Cytometry (Intracellular) - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280)

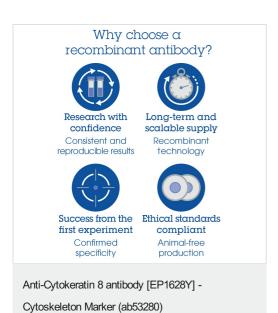




OI-RD Scanning - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280)

Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about K_D



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