

Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker

Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) is a rabbit monoclonal antibody detecting Cytokeratin 8 in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, IHC-Fr, ICC/IF**. Suitable for **Human, Mouse**.

- KO validated for confirmed specificity
- Biophysical QC for unrivalled batch-batch consistency
- Over 130 publications
- Trusted since 2007

Lab Essentials

Recombinant

RabMAb

KO Validated

20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP1628Y
Purification technique	Affinity purification Protein A
Dissociation constant	4.6 x 10 ⁻¹⁰ M
Concentration	0.035 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/20
Notes	For unpurified use at 1:70.

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/10000
Notes	For unpurified use at 1/25,000 - 1/50,000.

Species	Human
Dilution info	1/10000
Notes	For unpurified use at 1/25,000 - 1/50,000.

Predicted

Species	Rat
Dilution info	-

Notes	-
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IHC-Fr

Tested

Species	Mouse
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Dilution info	-
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Notes	-
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Expected

Species	Human
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Dilution info	Use at an assay dependent concentration.
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Notes	-
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Predicted

Species	Rat
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Dilution info	-
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Notes	-
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ICC/IF

Tested

Species	Human
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Dilution info	1/100 - 1/500
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Notes	-
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Expected

Species	Mouse
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Dilution info	Use at an assay dependent concentration.
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Notes	-
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Predicted

Species	Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Mouse
Dilution info	1/20
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/250
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Expected

Species	Human
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Dilution info	Use at an assay dependent concentration.
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Notes	-
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Predicted

Species	Rat
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Dilution info	-
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Notes	-
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Target data

[See full target information KRT8](#) 

Function	Required for the formation of KRT8/KRT18 filaments that are involved in ARHGEF40-mediated actin stress fiber formation and tensional force-induced stress fiber formation and reinforcement (PubMed:26823019). Together with KRT19, helps to link the contractile apparatus to dystrophin at the costameres of striated muscle.
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Storage

Shipped at conditions	Conditional Ambient
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Appropriate short-term storage duration	1-2 weeks
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Appropriate short-term storage conditions	+4°C
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Appropriate long-term storage conditions	-20°C
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Aliquoting information	Upon delivery aliquot
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Storage information	Avoid freeze / thaw cycle
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Notes

Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) was developed by Abcam using patented rabbit monoclonal antibody technology and is validated for use in Flow Cyt (Intra), ICC/IF, IHC-Fr, IHC-P, IP, WB in human, mouse samples.

Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) has been cited over 135 times in peer

reviewed journals and is trusted by the scientific community.

Abcams high quality manufacturing and validation processes ensure Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) has high sensitivity and specificity alongside high lot-to-lot consistency and reproducibility.

The specificity of Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) has been confirmed by testing in knockout samples.

Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) has 9 independent reviews from customers.

Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) specifically detects Cytokeratin 8 (UniProt ID: P05787; Molecular weight: 54kDa) and is sold in 100 uL and 1 mL selling sizes.

Conjugation-ready, carrier free format available for antibody clone EP1628Y - ab217173.

Antibody clone EP1628Y is also available pre-conjugated to a variety of labels for your convenience - Alexa Fluor® 488, Alexa Fluor® 647, HRP, PE, Alexa Fluor® 45 (ab192467, ab192468, ab19394, ab29297, ab21139).

Cytokeratin 8 (CK8) is a type II cytoskeletal keratin protein that is used as a diagnostic marker to differentiate various carcinomas. CK8 is involved in cell signaling, attachment, and stress adaptation, which are crucial for cancer cell survival and progression.

Patented technology

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

What are the advantages of a recombinant monoclonal antibody?

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 batch production

For more information, read more on recombinant antibodies.

Species reactivity

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

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

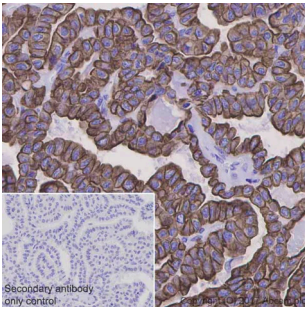
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

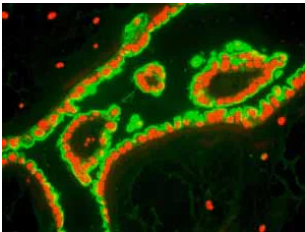
21 product images



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

Cytokeratin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 8 antibody

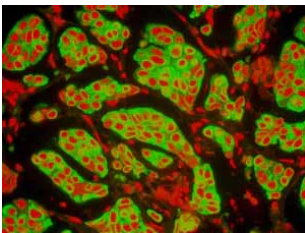
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid carcinoma tissue sections labeling Cytokeratin 8 with Purified ab53280 at 1:250 dilution. Heat mediated antigen retrieval was performed using [ab93684](#) (Tris/EDTA buffer, pH 9.0). Tissue was counterstained 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.



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

Cytokeratin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 8 antibody

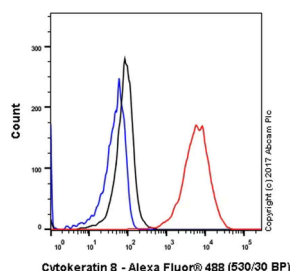
Fluorescent immunohistochemical analysis of paraffin-embedded human ovarian carcinoma tissue using unpurified ab53280. Green-CK8 red-PI.



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

Cytokeratin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 8 antibody

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

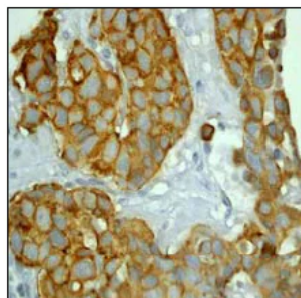


Flow Cytometry (Intracellular) - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280)

Cytokeratin 8 Flow Cytometry (Intracellular) staining using rabbit Anti-Cytokeratin 8 antibody

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cytokeratin 8 with purified ab53280 at 1/20 dilution (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

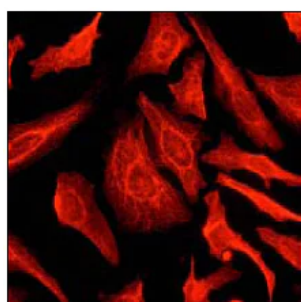
Alexa Fluor® 488 ([ab192467](#)) and Alexa Fluor® 647 ([ab192468](#)) conjugated versions are available for this clone.



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

Cytokeratin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 8 antibody

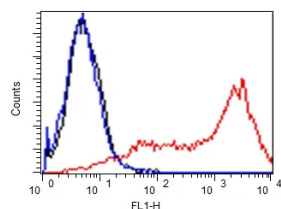
Unpurified ab53280 (1:250) staining human Cytokeratin 8 in human breast adenocarcinoma tissue by immunohistochemistry using paraffin embedded tissue.



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

Cytokeratin 8 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cytokeratin 8 antibody

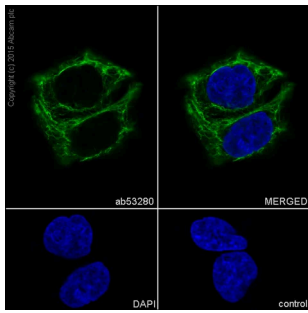
Immunofluorescent staining of HeLa cells using unpurified ab53280 (1:100).



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

Cytokeratin 8 Flow Cytometry (Intracellular) staining using rabbit Anti-Cytokeratin 8 antibody

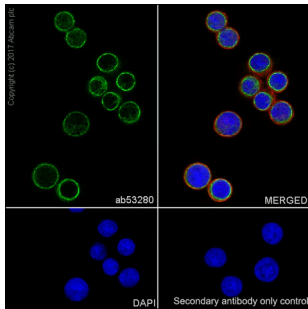
Overlay histogram showing HeLa cells stained with unpurified ab53280 (red line). The cells were fixed with 2%PFA (room temperature, 30 min) and then permeabilized with 1%FACS permeabilizing solution for 30 min. The cells were then incubated in 3% FBS in 1X PBS followed by the antibody (ab53280, 1/20 dilution) for 1 hour at room temperature. The cells were then incubated for 30 min at room temperature with the secondary antibody. An isotype control antibody (black line) was used and an unlabelled sample (blue line) was also used as a control.



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

Cytokeratin 8 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cytokeratin 8 antibody

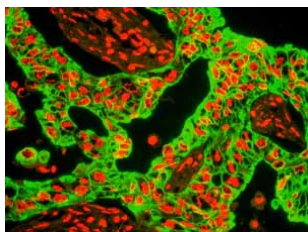
Immunocytochemistry/Immunofluorescence analysis of HeLa (human cervix adenocarcinoma) labelling Cytokeratin 8 with purified ab53280 at 1/500. Cells were fixed with 4% Paraformaldehyde and permeabilised by 0.1% tritonX-100. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody ([ab150077](#)). Nuclei counterstained with DAPI (blue).



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

Cytokeratin 8 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cytokeratin 8 antibody

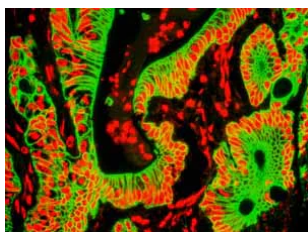
Immunocytochemistry/ Immunofluorescence analysis of HT-29 (Human colorectal adenocarcinoma epithelial cell) cells labeling Cytokeratin 9 with Purified ab53280 at 1:500 dilution. Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with [ab195889](#) Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). [ab150077](#) Goat anti rabbit IgG(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 ([ab192467](#)) and Alexa Fluor® 647 ([ab192468](#)) conjugated versions are available for this clone.



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

Cytokeratin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 8 antibody

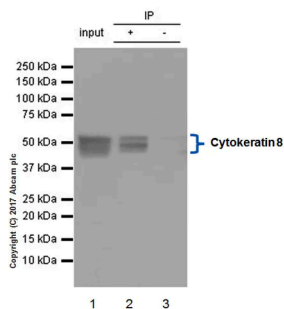
Fluorescent immunohistochemical analysis of paraffin-embedded human endometrial carcinoma tissue using unpurified ab53280. Green-CK8 red-PI.



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

Cytokeratin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 8 antibody

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



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 (ab172730) instead of ab53280 in HeLa whole cell lysate

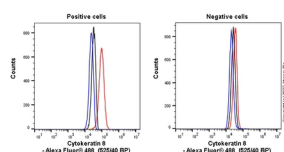
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.

All lanes:

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

Predicted band size: 53 kDa



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

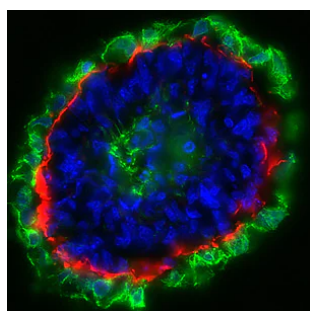
Cytokeratin 8 Flow Cytometry (Intracellular) staining using rabbit Anti-Cytokeratin 8 antibody

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 10⁶ in 100µl at 0.2µg/ml (1/11500)) for 30min at 22°C.

The secondary antibody Goat Anti-Rabbit IgG 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.



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

Cytokeratin 8 Immunohistochemistry (Frozen sections) staining using rabbit Anti-Cytokeratin 8 antibody

Image: Courtesy of Dr. Shaohua Li, UMDNJ-Robert Wood Johnson Medical School

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

This image is courtesy of Dr. Shaohua Li

Primary antibody 2: Rat anti-perlecan, 1:100

Secondary antibody 1: Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488) pre-adsorbed ([ab150081](#)), 1:200

Secondary antibody 2: Goat polyclonal Secondary Antibody to Rat IgG - H&L (Cy5®) pre-adsorbed ([ab150081](#)), 1:200

Nuclei were counterstained with DAPI

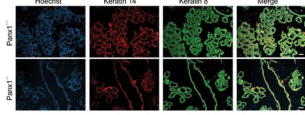


Image from Stewart M.K. et al PLoS One. 2016 Apr 21;11(4):e0154162. doi: 10.1371/journal.pone.0154162. eCollection 2016.

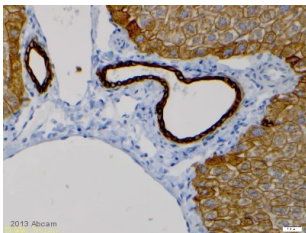
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker ([ab53280](#))

Cytokeratin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 8 antibody

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 μ m.

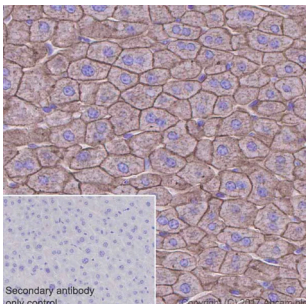


This image is courtesy of an anonymous customer review

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

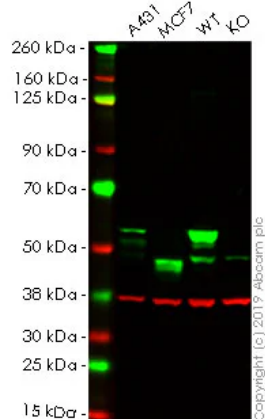
Cytokeratin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 8 antibody

Unpurified [ab53280](#) staining Cytokeratin 8 in Mouse liver tissue 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded 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)

Cytokeratin 8 Western blot staining using rabbit Anti-Cytokeratin 8 antibody

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 IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:

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

Lane 1:

A431 cell lysate at 20 µg

Lane 2:

MCF7 cell lysate at 20 µg

Lane 3:

Wild-type HeLa cell lysate at 20 µg

Lane 4:

Western blot - Human KRT8 (Cytokeratin 8) knockout HeLa cell lysate (ab263785) at 20 µg

Secondary

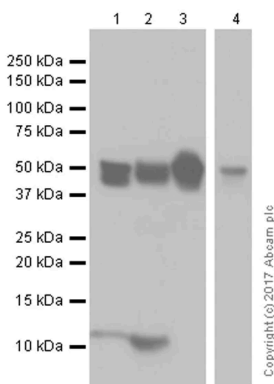
All lanes:

Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 53 kDa

Observed band size: 37 kDa, 52 kDa



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

Cytokeratin 8 Western blot staining using rabbit Anti-Cytokeratin 8 antibody

Blocking and diluting buffer: 5% NFDM/TBST.

All lanes:

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

Lane 1:

A431 (Human epidermoid carcinoma epithelial cell) whole cell lysates at 20 µg

Lane 2:

Human breast cancer lysates at 20 µg

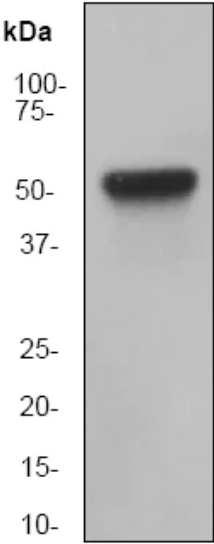
Lane 3:
HaCaT (Human skin keratinocyte) whole cell lysates at 20 µg

Lane 4:
Mouse colon lysates at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 53 kDa



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

All lanes:
Western blot - Anti-Cytokeratin 8 antibody [EP1628Y] - Cytoskeleton Marker (ab53280) at 1/50000 dilution

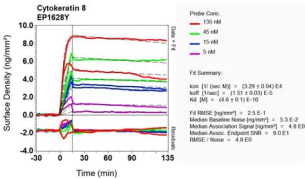
All lanes:
A431 cell lysate at 10 µg

Secondary

All lanes:
Goat anti-Rabbit HRP labeled at 1/2000 dilution

Predicted band size: 53 kDa

Observed band size: 52 kDa



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

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.