

Product datasheet

Anti-Cytokeratin 19 antibody [EPR1579Y] α b76539

KO **VALIDATED** Recombinant RabMAb[®]

★★★★★ [3 Abreviews](#) [11 References](#) [10 Images](#)

Overview

Product name	Anti-Cytokeratin 19 antibody [EPR1579Y]
Description	Rabbit monoclonal [EPR1579Y] to Cytokeratin 19
Host species	Rabbit
Specificity	In our WB testing this antibody did not recognize mouse Cytokeratin 19, but customers have reported the antibody recognizes the protein in IHC-P with mouse tissue. Thus, we have removed mouse as a "does not react with" species and welcome further feedback from other researchers using this antibody in mouse.
Tested applications	Suitable for: Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: T47D, HepG2 or SKBR-3 cell lysate; IHC-P: Human stomach adenocarcinoma tissue. IF/ICC: HCT116 cell line. MCF7 cells (MCF7-KRT19 KO used as negative cell line).
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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide

	Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1579Y
Isotype	IgG

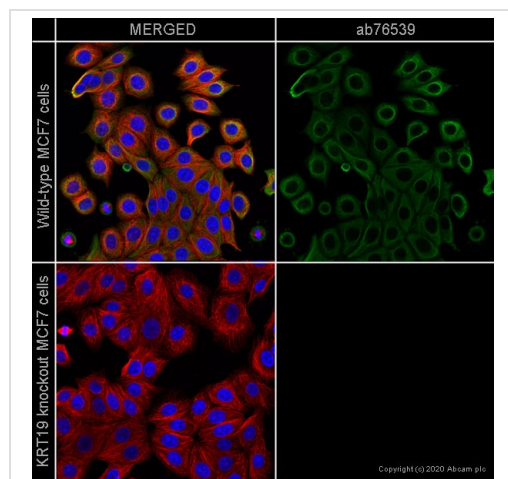
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab76539 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
Flow Cyt (Intra)		1/20. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/10000 - 1/50000. Predicted molecular weight: 44 kDa.
IP		1/20.
IHC-P		1/1000. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. See IHC antigen retrieval protocols . For unpurified use at 1/100 - 1/250.
ICC/IF	★★★★★ (1)	1/100 - 1/250. Signal can be observed in cells fixed with either methanol or paraformaldehyde.

Target

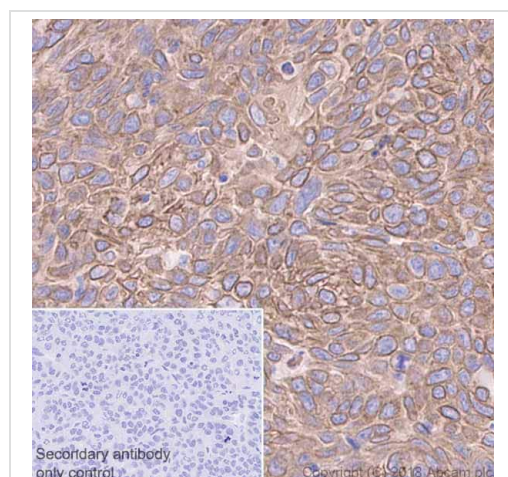
Function	Involved in the organization of myofibers. Together with KRT8, helps to link the contractile apparatus to dystrophin at the costameres of striated muscle.
Tissue specificity	Expressed in a defined zone of basal keratinocytes in the deep outer root sheath of hair follicles. Also observed in sweat gland and mammary gland ductal and secretory cells, bile ducts, gastrointestinal tract, bladder urothelium, oral epithelia, esophagus, ectocervical epithelium (at protein level). Expressed in epidermal basal cells, in nipple epidermis and a defined region of the hair follicle. Also seen in a subset of vascular wall cells in both the veins and artery of human umbilical cord, and in umbilical cord vascular smooth muscle. Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma in structures that contain dystrophin and spectrin.
Sequence similarities	Belongs to the intermediate filament family.
Developmental stage	Present in hair follicles at all stages of development.
Domain	This keratin differs from all other IF proteins in lacking the C-terminal tail domain.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 19 antibody [EPR1579Y] (ab76539)

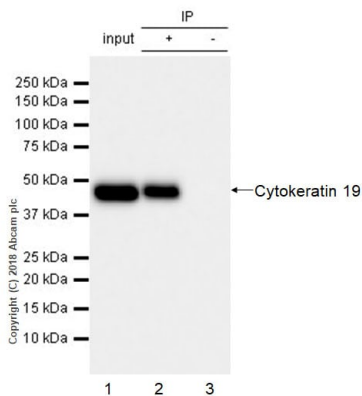
ab76539 staining Cytokeratin 19 in wild-type MCF7 cells (top panel) and KRT19 knockout MCF7 cells (bottom panel). The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab76539 at 1/500 dilution and **ab7291** (Mouse monoclonal to alpha Tubulin) at 1/1000 dilution overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit IgG (Alexa Fluor® 488) (**ab150081**) at 2 µg/ml (shown in green) and a goat secondary antibody to mouse IgG (Alexa Fluor® 594) (**ab150120**) at 2 µg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EPR1579Y] (ab76539)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung cancer tissue sections labeling Cytokeratin 19 with Purified ab76539 at 1:1000 dilution (0.12 µg/ml). 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.



Immunoprecipitation - Anti-Cytokeratin 19 antibody
[EPR1579Y] (ab76539)

ab76539 (purified) at 1:20 dilution (2ug) immunoprecipitating Cytokeratin 19 in SKBR-3 whole cell lysate.

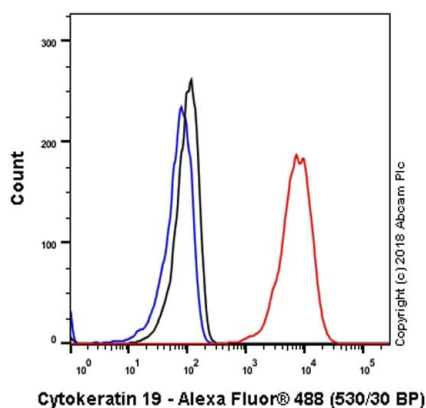
Lane 1 (input): SK-BR-3 (Human breast adenocarcinoma epithelial cell) whole cell lysate 10 µg

Lane 2 (+): ab76539 & SKBR-3 whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab76539 in SKBR-3 whole cell lysate

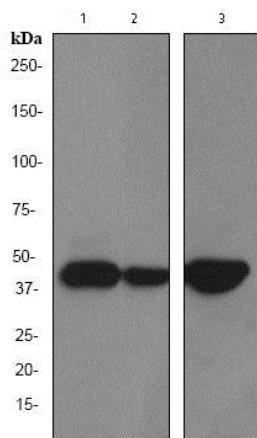
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Flow Cytometry (Intracellular) - Anti-Cytokeratin 19 antibody [EPR1579Y] (ab76539)

Intracellular Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling Cytokeratin 19 with purified ab76539 at 1/20 dilution (10 µg/ml) (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).



Western blot - Anti-Cytokeratin 19 antibody
[EPR1579Y] (ab76539)

All lanes : Anti-Cytokeratin 19 antibody [EPR1579Y] (ab76539) at 1/10000 dilution (unpurified)

Lane 1 : T47D cell lysate

Lane 2 : HepG2 cell lysate

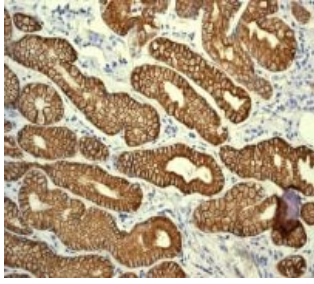
Lane 3 : SKBR-3 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

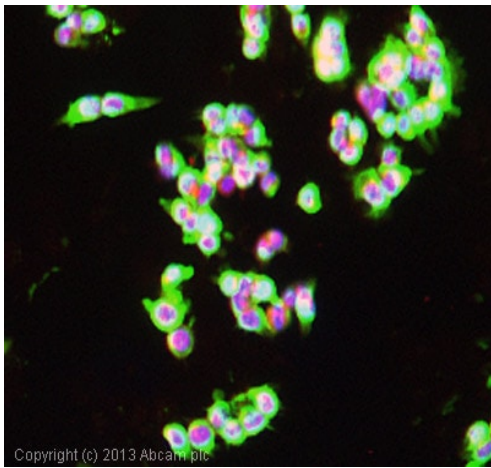
Predicted band size: 44 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EPR1579Y] (ab76539)

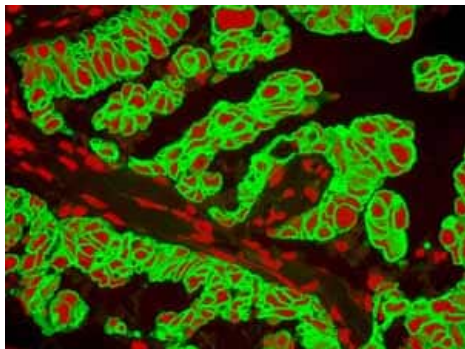
Immunohistochemical staining of human stomach adenocarcinoma tissue with ab76539 (unpurified) at 1/100-1/250.

Heat mediated antigen retrieval was performed via the pressure cooker method before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 19 antibody [EPR1579Y] (ab76539)

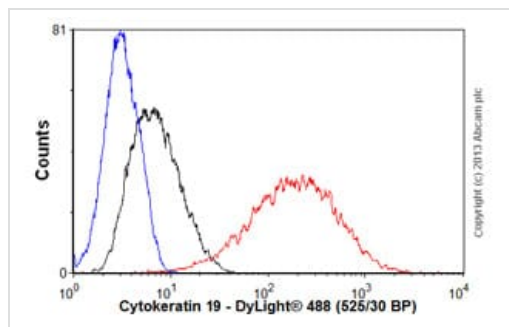
ab76539 (unpurified) stained HCT116 cells. The cells were 4% formaldehyde fixed for 10 minutes at room temperature and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab76539 at 1/200 dilution) overnight at +4°C. The secondary antibody (pseudo-colored green) was Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed ([ab150081](#)) used at a 1/1000 dilution for 1 hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1 hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43 µM for 1 hour at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EPR1579Y] (ab76539)

Fluorescent immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ab76539 (unpurified). Green-CK19 red-PI.

Heat mediated antigen retrieval was performed via the pressure cooker method before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Cytokeratin 19 antibody [EPR1579Y] (ab76539)

Overlay histogram showing MCF7 cells stained with unpurified ab76539 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab76539, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) ([ab96899](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

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-Cytokeratin 19 antibody [EPR1579Y] (ab76539)

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