abcam

Product datasheet

Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free ab232566

KO VALIDATED Recombinant RabMAb

9 Images

Overview

Product name	Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free
Description	Rabbit monoclonal [EPR1579Y] to Cytokeratin 19 - BSA and Azide free
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:** IHC-P, WB, ICC/IF, IP, Flow Cyt (Intra)
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human Cytokeratin 19 (N terminal). The exact sequence is proprietary.
Positive control	IHC-P: Human lung cancer tissue.
General notes	ab232566 is the carrier-free version of **ab76539**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1579Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab232566 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
WB		Use at an assay dependent concentration. Predicted molecular weight: 44 kDa.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

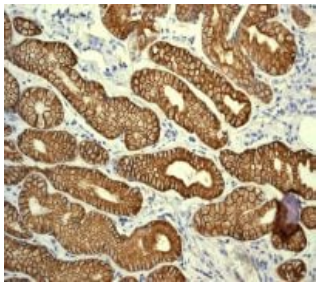
Target

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.

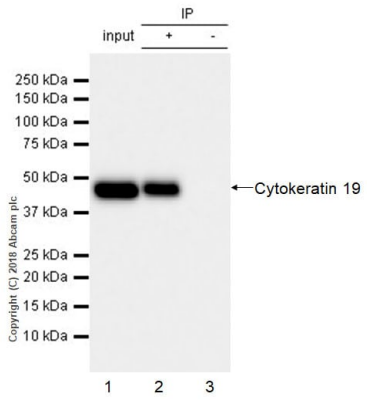
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free (ab232566)

Immunohistochemical staining of human stomach adenocarcinoma tissue with **ab76539** (unpurified) at1/100-1/250.

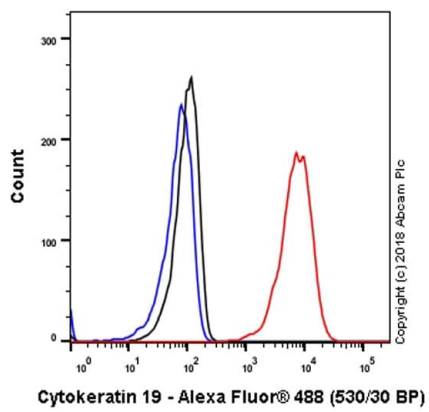
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76539**).



Immunoprecipitation - Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free (ab232566)

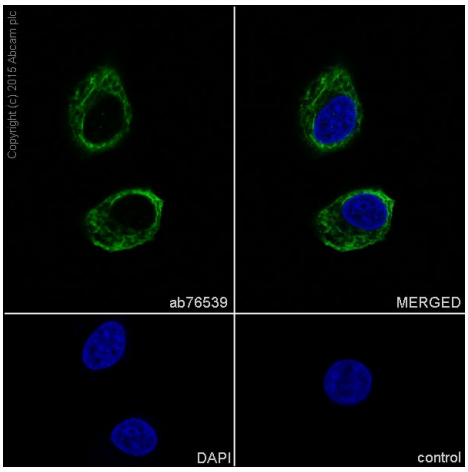
ab76539 (purified) at 1:20 dilution (2ug) immunoprecipitating Cytokeratin 19 in SKBR-3 whole cell lysate.
Lane 1 (input): SK-BR-3 (Human breast adenocarcinoma epithelial cell) whole cell lysate 10 µg
Lane 2 (+): **ab76539** & SKBR-3 whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76539**).



Flow Cytometry (Intracellular) - Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free (ab232566)

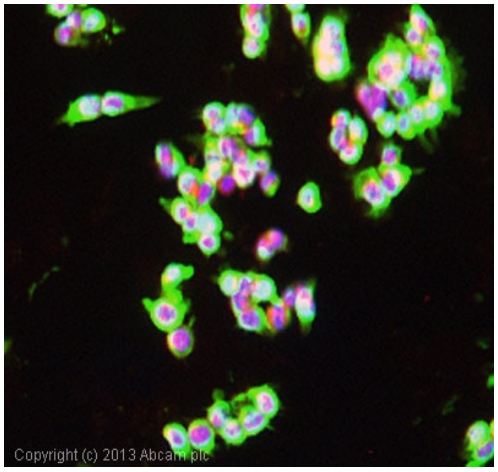
Intracellular Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling Cytokeratin 19 with purified **ab76539** at 1/20 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76539**).



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free (ab232566)

Immunofluorescence staining of MCF-7 cells with purified **ab76539** at a working dilution of 1/500, counter-stained with DAPI. The secondary antibody was an Alexa Fluor® 488 conjugated goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. The cells were fixed in 100% methanol. The negative control is shown in bottom right hand panel - for the negative control, PBS was used instead of the primary antibody.

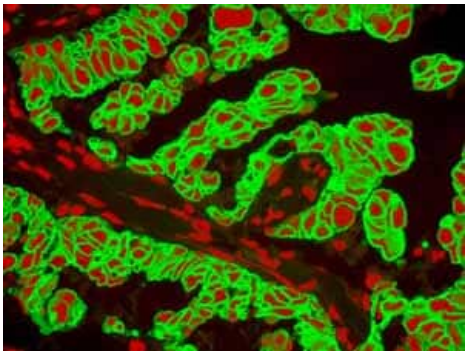
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76539**).



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free (ab232566)

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 1hour 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 1hour at room temperature.

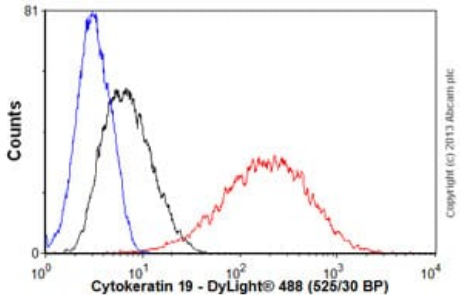
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76539**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free (ab232566)

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

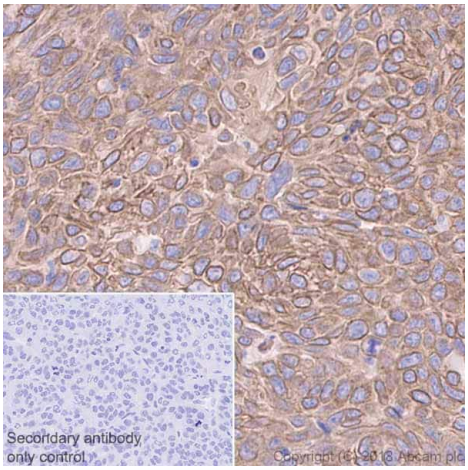
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76539**).



Flow Cytometry (Intracellular) - Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free (ab232566)

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/1x10^6 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76539**).

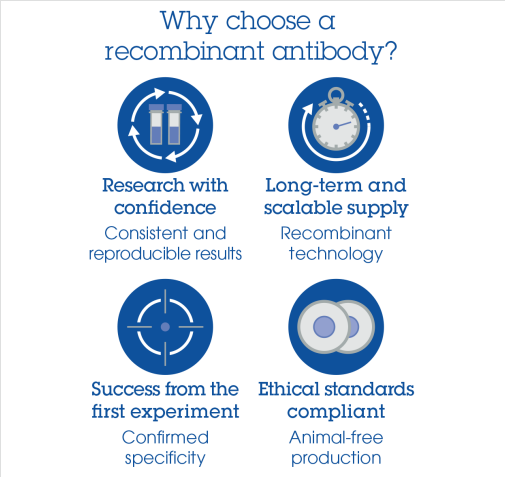


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free (ab232566)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76539**).



Anti-Cytokeratin 19 antibody [EPR1579Y] - BSA and Azide free (ab232566)

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