abcam

ab9221

Anti-Cytokeratin 19 antibody [RCK108]

Anti-Cytokeratin 19 antibody [RCK108] (ab9221) is a mouse monoclonal antibody detecting Cytokeratin 19 in **Flow Cytometry, IHC-P, IHC-Fr**. Suitable for **Human, Zebrafish**.

- Over 10 publications
- Trusted since 2002

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.09% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing T24 cell line protein. The exact immunogen used to generate this antibody is proprietary information.
Clone number	RCK108
Purification technique	Affinity purification Protein A
Specificity	This antibody reacts exclusively with cytokeratin 19 which is present in glandular-type epithelia and most carcinomas. It does not react with hepatocytes and hepatocellular carcinoma.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/100 - 1/200
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Expected

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

IHC-P

Tested

Species	Human
Dilution info	1/100 - 1/200
Notes	-

Expected

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

IHC-Fr

Tested

Species	Zebrafish
Dilution info	1/100 - 1/200
Notes	-

Species	Human
Dilution info	1/100 - 1/200

Notes	-

Target data

See full target information KRT19

Function	Involved in the organization of myofibers. Together with KRT8, helps to link the contractile apparatus to dystrophin at the costameres of striated muscle.

Storage

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

Notes

What is this antibody validated in?
Anti-Cytokeratin 19 antibody [RCK108] (ab9221) is a mouse monoclonal antibody and is validated for use in Flow Cytometry (Flow Cyt), Immunohistochemistry (IHC-P), Immunohistochemistry (IHC-Fr) in Human, Zebrafish samples.

Trusted by the scientific community
Anti-Cytokeratin 19 [RCK108] (ab9221) was first used in a scientific publication in 2002 and has been cited over 10 times in peer-reviewed journals.

Reviewed by scientists
Anti-Cytokeratin 19 [RCK108] (ab9221) has over 5 independent reviews from customers.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Cytokeratin 19 (CK19) also known as cytokeratine 19 keratin 19 (KRT19) or CK19 is a type of intermediate filament found in epithelial cells. It serves as an essential component of the cytoskeleton. CK19 weighs approximately 40 kDa and is broadly expressed in simple epithelial tissues including liver intestine and various glandular epithelial cells. As a cytokeratin marker it often appears in combination with others like cytokeratin 17 in certain tissue types helping to maintain the structural integrity of cells.
Biological function summary	CK19 plays a role in maintaining the cytoskeletal framework that provides mechanical support and helps control cell size and shape. It is not part of a large protein complex but works closely with other cytokeratins to ensure the stability and resilience of epithelial tissues. The A53-B/A22.26 positive staining is often used to confirm its presence in clinical histopathology.
Pathways	CK19 connects to cellular processes especially involving the keratinization and epithelial cell differentiation pathways. It interacts with other cytokeratins including BA16 and KR17 to facilitate these processes. This interaction aids in modulating the dynamics of cytoskeletal rearrangement during cell movement division and differentiation.
Associated diseases and disorders	CK19 overexpression is linked with certain cancers notably hepatocellular carcinoma and breast cancer. It can serve as a prognostic marker in these diseases often in conjunction with other markers like CK17. The involvement of CK19 in the epithelial-mesenchymal transition (EMT) process connects it to the progression and aggressiveness of tumors facilitated by interactions with proteins involved in EMT pathways.

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

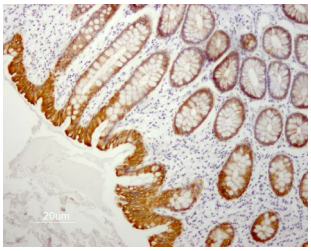
We do not recommend this combination. It is not covered by our product promise.

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.

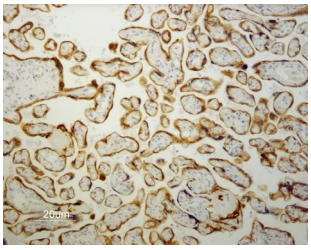
9 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [RCK108] (ab9221)

Cytokeratin 19 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Cytokeratin 19 antibody

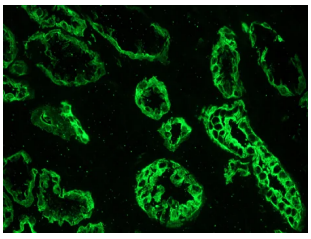
Indirect immunoperoxidase staining of human small intestine paraffin tissue section with ab9221. Dilution 1:50 and microwave pretreatment. Specific staining of the epithelial cells. No reactivity in the connective tissues.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [RCK108] (ab9221)

Cytokeratin 19 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Cytokeratin 19 antibody

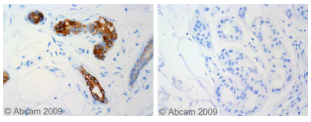
Indirect immunoperoxidase staining of human placenta paraffin tissue section with ab9221. Dilution 1:50 and microwave pretreatment. Specific staining of the epithelial cells. No reactivity in the connective tissues.



Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 19 antibody [RCK108] (ab9221)

Cytokeratin 19 Immunohistochemistry (Frozen sections) staining using mouse Anti-Cytokeratin 19 antibody

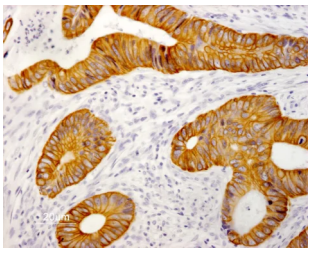
Immunohistochemistry on frozen tissue sections of human colon with ab9221 (1:500).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [RCK108] (ab9221)

Cytokeratin 19 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Cytokeratin 19 antibody

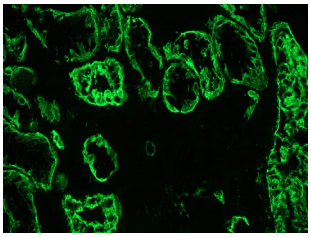
ab9221 staining Cytokeratin 19 in human skin (sweat glands).
Left panel: with primary antibody at 1 ug/ml. Right panel: isotype control.
Sections were stained using an automated system (DAKO Autostainer Plus), at room temperature: sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffers citrate pH6.1 in a DAKO PT link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [RCK108] (ab9221)

Cytokeratin 19 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Cytokeratin 19 antibody

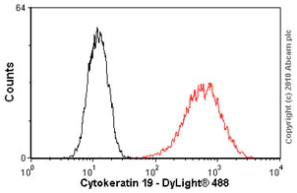
Indirect immunoperoxidase staining of human colon adenocarcinoma paraffin tissue section with ab9221. Dilution 1:50 and microwave pretreatment. Specific staining of the epithelial tumor cells. No reactivity in connective tissues.



Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 19 antibody [RCK108] (ab9221)

Cytokeratin 19 Immunohistochemistry (Frozen sections) staining using mouse Anti-Cytokeratin 19 antibody

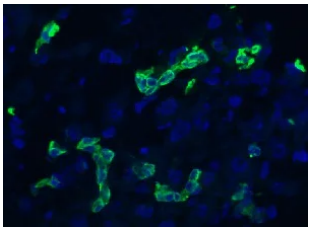
Immunohistochemistry on a frozen tissue sections of human kidney with ab9221 (1:500).



Flow Cytometry - Anti-Cytokeratin 19 antibody [RCK108] (ab9221)

Cytokeratin 19 Flow Cytometry staining using mouse Anti-Cytokeratin 19 antibody

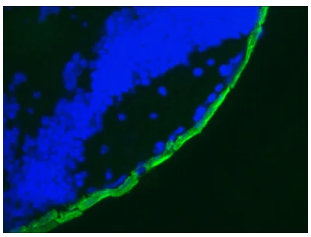
Overlay histogram showing MCF-7 cells stained with ab9221 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab9221, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in MCF-7 cells fixed with methanol (5 min)/permeabilized in 0.1% PBS-Triton used under the same conditions.



Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 19 antibody [RCK108] (ab9221)

Cytokeratin 19 Immunohistochemistry (Frozen sections) staining using mouse Anti-Cytokeratin 19 antibody

Immunohistochemistry on frozen section of human liver bile duct epithelium



Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 19 antibody [RCK108] (ab9221)

Cytokeratin 19 Immunohistochemistry (Frozen sections) staining using mouse Anti-Cytokeratin 19 antibody

ab9221 staining cytokeratin 19 in three-day-old Zebrafish tissue by Immunohistochemistry (Frozen sections).

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