abcam

ab240985

Anti-KRT6C antibody [SP87] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	SP87
Purification technique	Affinity purification Protein A/G
Concentration	1.012 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from TCS by protein A/G.

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-

Notes	-

Expected

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

Predicted

Species	Cow
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Cow
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/200
Notes	Boil tissue section in 10mM citrate, pH 6.0 for 10 min followed by cooling at room temperature for 20 min. Incubate with ab227643 for 10 minutes at room temperature.

Species	Rat
Dilution info	1/200
Notes	Boil tissue section in 10mM citrate, pH 6.0 for 10 min followed by cooling at room temperature for 20 min. Incubate with ab227643 for 10 minutes at room temperature.

Species	Human
Dilution info	1/200
Notes	Boil tissue section in 10mM citrate, pH 6.0 for 10 min followed by cooling at room temperature for 20 min. Incubate with ab227643 for 10 minutes at room temperature.

Predicted

Species	Cow
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Mouse, Rat
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Cow
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	Primary antibody incubation for 30 minutes at 4Â°C.

Expected

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

Predicted

Species	Cow
Dilution info	-
Notes	-

Target data

See full target information KRT6C

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C

Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab240985 is the carrier-free version of ab227643.
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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

Compatibility
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.

Supplementary info

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

Activity summary	KRT6C also known as Keratin 6C is a type II cytokeratin involved mechanically in structural support and protection in epithelial tissues. The protein has a molecular mass of approximately 59-60 kDa. It is mainly expressed in stratified epithelia including the skin mucosal linings and other keratinized surfaces. KRT6C provides resilience and strength to cells by forming keratin intermediate filaments that create a robust cytoskeletal network.
Biological function summary	Within various stratified epithelial tissues KRT6C ensures cellular integrity and facilitates protection against mechanical stress. As part of the keratin intermediate filament protein family KRT6C often interacts with other keratins typically forming complexes with KRT16 and KRT17 which enhance cell stability and responsiveness to damage. This protein plays a role in wound healing and cellular proliferation.
Pathways	KRT6C participates in several key biological processes including wound healing and the stress response pathway. In these pathways KRT6C functions closely with other proteins such as KRT16 which modulates cellular responses to

	environmental stressors and helps repair the epithelial barrier. The integration of KRT6C in these pathways highlights its importance in maintaining epithelial health and facilitating rapid response to injury.
Associated diseases and disorders	KRT6C has significant connections with pachyonychia congenita a rare genetic disorder characterized by nail dystrophy and thickened skin. This condition often involves mutations in the KRT6C gene disrupting its interaction with KRT16 and KRT17 which compromises structural integrity of the skin and nail tissues. Furthermore KRT6C has implications in psoriasis a chronic inflammatory skin disorder where its altered expression may influence disease progression or severity.

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

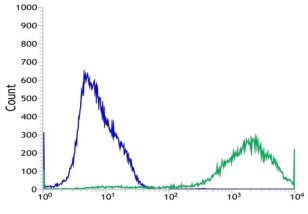
We do not recommend this combination. It is not covered by our product promise.

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.

19 product images

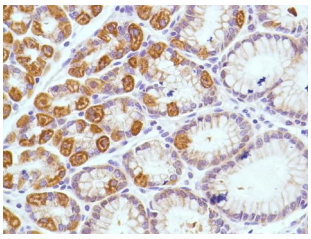


Flow Cytometry (Intracellular) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Flow Cytometry (Intracellular) staining using rabbit Anti-KRT6C antibody

Intracellular flow cytometric analysis of A431 (human epidermoid carcinoma cell line) cell line labeling KRT6C with ab227643 at 1/100 dilution (green) compared with a negative control rabbit

IgG (blue).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643).

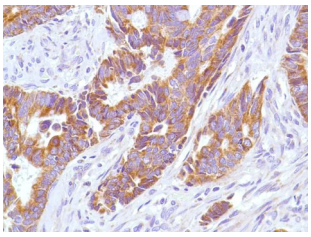


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human stomach tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)

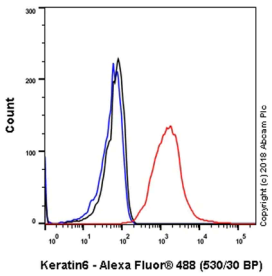


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human rectal adenocarcinoma tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

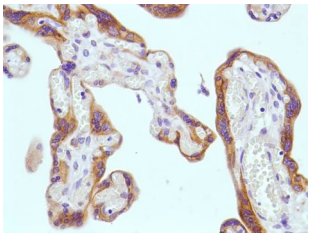
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)



Flow Cytometry (Intracellular) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Flow Cytometry (Intracellular) staining using rabbit Anti-KRT6C antibody

Intracellular Flow Cytometry analysis of HaCaT (human skin keratinocyte) labeling KRT6C with purified ab227643 at 1/200 dilution (0.48µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor®488, ab150077) at 1/2000 dilution was used as a secondary antibody. Isotype control - Rabbit monoclonal IgG (ab172730) (black). Unlableled control - Unlabelled cells (blue).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643).

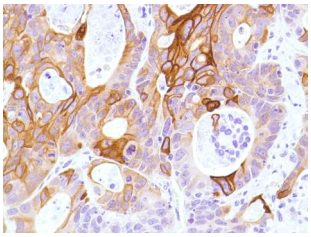


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human placenta tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)

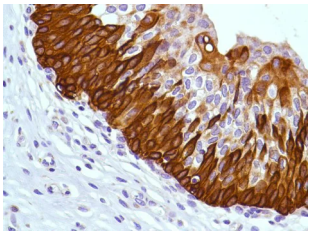


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human colon adenocarcinoma tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)

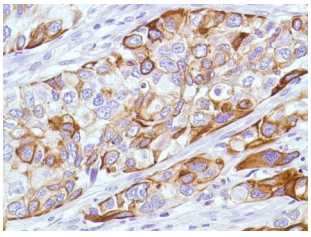


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human bladder tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)

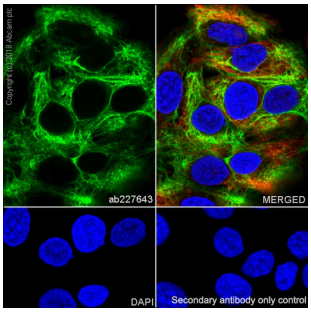


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human bladder transitional cell carcinoma tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

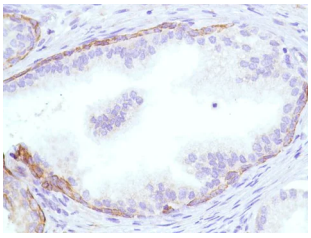
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)



Immunocytochemistry/ Immunofluorescence - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-KRT6C antibody

Immunocytochemistry/ Immunofluorescence analysis of HaCaT (human skin keratinocyte) cells labeling KRT6C with purified ab227643 at 1/50 (1.92 µg/ml). Cells were fixed in 100% Methanol. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643).

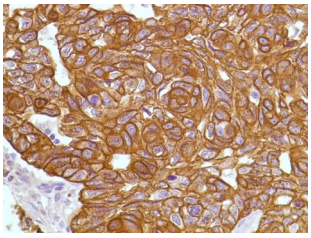


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human prostate tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)

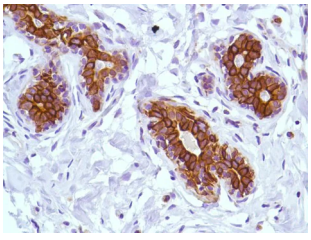


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human lung squamous cell carcinoma tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)

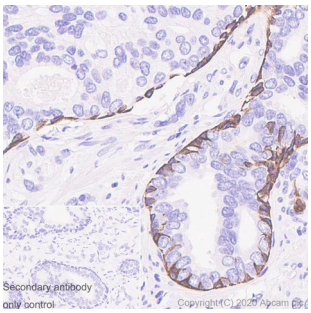


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human breast tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

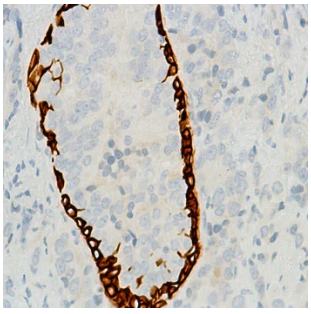
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

This data was developed using the same antibody clone in a different buffer formulation (ab227643).
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human prostate carcinoma tissue sections labeling KRT6C with ab227643 at 1/200 dilution (0.12 µg/ml). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Leica DS9800 (Bond™ Polymer Refine Detection) was used as a secondary antibody. Hematoxylin was used as a counterstain. Positive staining on the human prostate carcinoma, performed on a Leica Biosystems BOND™ RX instrument.
The section was incubated with ab227643 for 10 mins at room temperature.

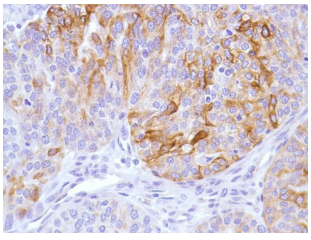


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human prostate carcinoma tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)

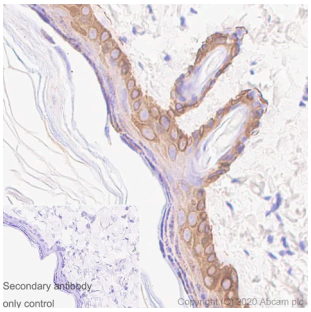


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

Formalin-fixed, paraffin-embedded human ovarian adenocarcinoma tissue stained for KRT6C using ab227643 at 1/200 dilution in immunohistochemical analysis.

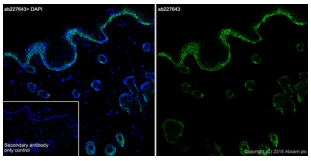
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

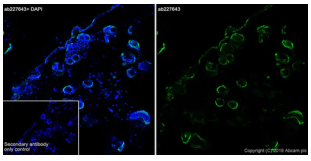
This data was developed using the same antibody clone in a different buffer formulation (ab227643).
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat skin tissue sections labeling KRT6C with ab227643 at 1/200 dilution (0.12 µg/ml). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Leica DS9800 (Bond™ Polymer Refine Detection) was used as a secondary antibody. Hematoxylin was used as a counterstain. Positive staining on the rat skin, performed on a Leica Biosystems BOND™ RX instrument.
The section was incubated with ab227643 for 10 mins at room temperature.



Immunohistochemistry (Frozen sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Frozen sections) staining using rabbit Anti-KRT6C antibody

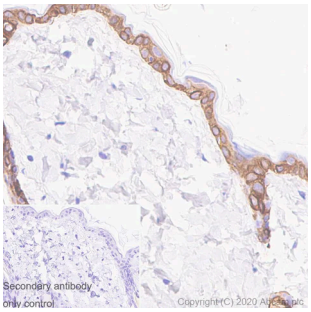
Immunohistochemistry (Frozen) analysis of rat skin tissue section labeling KRT6C with purified ab227643 at 1/25 (3.84µg/ml). Sections were fixed in 4% paraformaldehyde and permeabilized with 0.2% Triton X-100. Antigen retrieval was Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643).



Immunohistochemistry (Frozen sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Frozen sections) staining using rabbit Anti-KRT6C antibody

Immunohistochemistry (Frozen) analysis of mouse skin tissue section labeling KRT6C with purified ab227643 at 1/25 (3.84µg/ml). Sections were fixed in 4% paraformaldehyde and permeabilized with 0.2% Triton X-100. Antigen retrieval was Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227643).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KRT6C antibody [SP87] - BSA and Azide free (ab240985)

KRT6C Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-KRT6C antibody

This data was developed using the same antibody clone in a different buffer formulation (ab227643).
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse skin tissue sections labeling KRT6C with ab227643 at 1/200 dilution (0.12 µg/ml). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Leica DS9800 (Bond™ Polymer Refine Detection) was used as a secondary antibody. Hematoxylin was used as a counterstain. Positive staining on the mouse skin, performed on a Leica Biosystems BOND™ RX instrument.
The section was incubated with ab227643 for 10 mins at room temperature.

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