abcam

ab279324

Alexa Fluor® 555 Anti-pan Cytokeratin antibody [C-11]

Recombinant

Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	Alexa Fluor® 555
Excitation/Emission	Ex: 555nm, Em: 565nm
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	C-11
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	-

Expected

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

Flow Cyt (Intra)

Expected

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

ICC/IF

Expected

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

Target data

See full target information KRT1

Function	May regulate the activity of kinases such as PKC and SRC via binding to integrin beta-1 (ITB1) and the receptor of activated protein C kinase 1 (RACK1). In complex with C1QBP is a high affinity receptor for kininogen-1/HMWK.

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, Store in the dark

Notes

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.

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Supplementary info

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

Activity summary	Pan cytokeratin also known as cytokeratin AE1/AE3 is a cytoskeletal protein complex that consists of different keratin polypeptides. It mechanically supports epithelial cells contributing to their structural integrity. The protein mass is variable due to its composite nature ranging between 40 to 67 kDa. Pan cytokeratin is expressed in epithelial tissues throughout the body serving as a reliable marker for identifying epithelial origin cells in histological studies.

Biological function summary	Keratins in pan cytokeratin contribute to maintaining structural stability within epithelial cells. They act as components of the cytoskeletal network interacting with other cellular structures to provide protection from stress and mechanical damage. Pan cytokeratin exists as part of the intermediate filament protein complex which plays a significant role in cellular mechanics and cohesion essential for tissue integrity.
Pathways	Intermediate filaments containing pan cytokeratin participate in pathways related to cell differentiation and stress response. Its interactions with other proteins like desmoplakin and plectin link the cytoskeletal filaments to cell membranes and the extracellular matrix. This involvement is important in pathways related to cellular structural integrity and epithelial-mesenchymal transition (EMT).
Associated diseases and disorders	Pan cytokeratin serves as a critical marker in the diagnosis of epithelial-derived cancers such as carcinoma and conditions like psoriasis. Abnormal expression patterns of pan cytokeratin indicate tumor presence and origin. Its connection to proteins such as E-cadherin and vimentin assists in understanding the progression and metastasis of cancer by facilitating EMT and tissue invasion diagnostics.

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

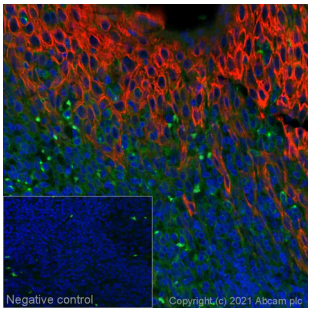
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 555 Anti-pan Cytokeratin antibody [C-11] (ab279324)

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

Immunofluorescence staining of pan Cytokeratin staining in a section of formalin-fixed paraffin-embedded human normal tonsil*.
Performed on a Leica BOND. The section was pre-treated using heat mediated antigen retrieval with EDTA (pH9.0) using retrieval settings of 110°C for 20 minutes. The section was then incubated at room temperature for 1 hour with ab279324 at 1/100 dilution (shown in red) and counterstained using ab195887, Ms anti-Tubulin (A488) (1/250) at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Dako Fluorescence Mounting Medium ®.

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

For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

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