


Alexa Fluor® 488 Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker ab185032

Recombinant RabMAb

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Overview

Product name	Alexa Fluor® 488 Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker
Description	Alexa Fluor® 488 Rabbit monoclonal [EP1623] to Cytokeratin 17 - Cytoskeleton Marker
Host species	Rabbit
Conjugation	Alexa Fluor® 488. Ex: 495nm, Em: 519nm
Tested applications	Suitable for: IHC-P, ICC/IF, Flow Cyt (Intra)
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells. IHC-P: Human bladder cancer and tonsil tissues.
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>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or</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 or -80°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), PBS, 1% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1623
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab185032 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		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/50 - 1/100.
Flow Cyt (Intra)		1/500. ab199091 - Rabbit monoclonal IgG (Alexa Fluor® 488), is suitable for use as an isotype control with this antibody.

Target

Function	May play a role in the formation and maintenance of various skin appendages, specifically in determining shape and orientation of hair. May be a marker of basal cell differentiation in complex epithelia and therefore indicative of a certain type of epithelial "stem cells". May act as an autoantigen in the immunopathogenesis of psoriasis, with certain peptide regions being a major target for autoreactive T-cells and hence causing their proliferation. Required for the correct growth of hair follicles, in particular for the persistence of the anagen (growth) state. Modulates the function of TNF-alpha in the specific context of hair cycling. Regulates protein synthesis and epithelial cell growth through binding to the adapter protein SFN and by stimulating Akt/mTOR pathway. Involved in tissue repair.
Tissue specificity	Expressed in the outer root sheath and medulla region of hair follicle specifically from eyebrow and beard, digital pulp, nail matrix and nail bed epithelium, mucosal stratified squamous epithelia and in basal cells of oral epithelium, palmoplantar epidermis and sweat and mammary glands. Also expressed in myoepithelium of prostate, basal layer of urinary bladder, cambial cells of

sebaceous gland and in exocervix (at protein level).

Involvement in disease

Defects in KRT17 are a cause of pachyonychia congenita type 2 (PC2) [MIM:167210]; also known as pachyonychia congenita Jackson-Lawler type. PC2 is an autosomal dominant ectodermal dysplasia characterized by hypertrophic nail dystrophy resulting in onychogryposis (thickening and increase in curvature of the nail), palmoplantar keratoderma and hyperhidrosis, follicular hyperkeratosis, multiple epidermal cysts, absent/sparse eyebrow and body hair, and by the presence of natal teeth.

Defects in KRT17 are a cause of steatocystoma multiplex (SM) [MIM:184500]. SM is a disease characterized by round or oval cystic tumors widely distributed on the back, anterior trunk, arms, scrotum, and thighs.

Note=KRT16 and KRT17 are coexpressed only in pathological situations such as metaplasias and carcinomas of the uterine cervix and in psoriasis vulgaris.

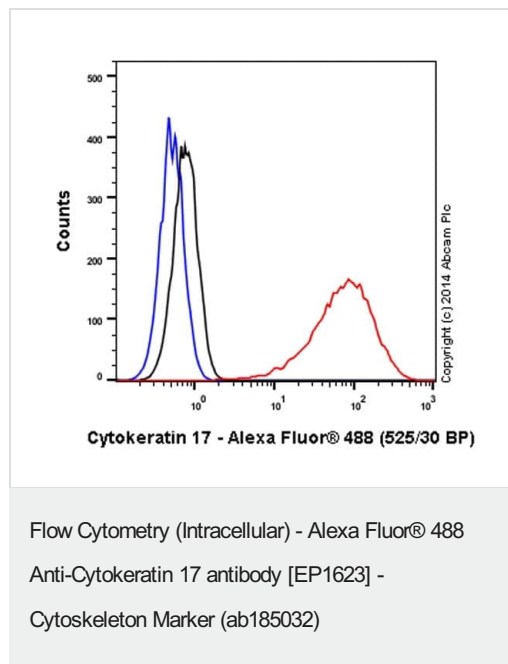
Sequence similarities

Belongs to the intermediate filament family.

Cellular localization

Cytoplasm.

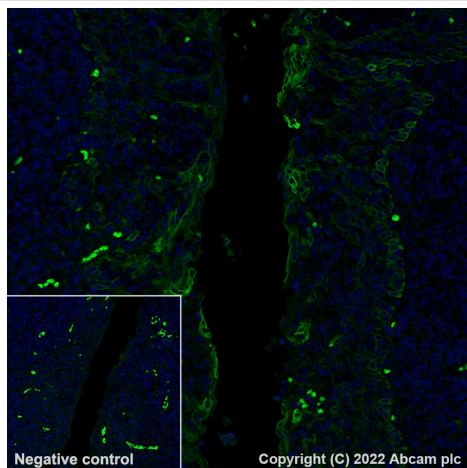
Images



Overlay histogram showing HeLa cells stained with ab185032 (red line). The cells were fixed with 80% methanol (5 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 (ab185032, 1/500 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Alexa Fluor® 488 used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

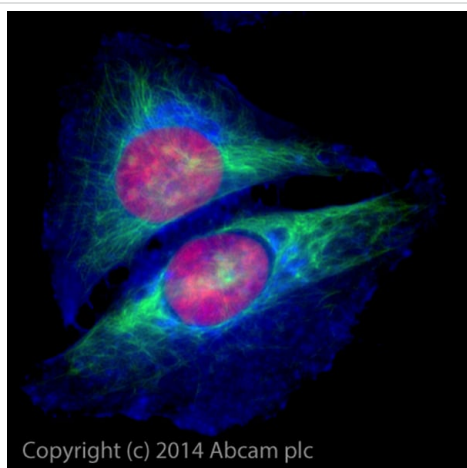
This antibody gave a positive signal in HeLa fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker (ab185032)

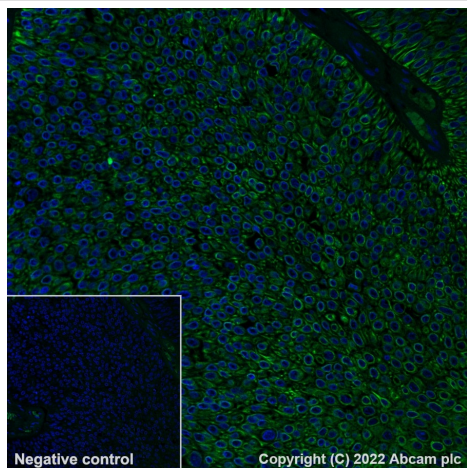
Immunohistochemistry analysis of paraffin-embedded human tonsil tissue sections labelling Cytokeratin 17 with ab185032 at 1/100 dilution. The section was incubated with ab185032 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®. Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 40 mins. Membrane staining on human tonsil tissue. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Negative Control: The negative control is PBS.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker (ab185032)

ab185032 staining Cytokeratin 17 in HeLa cells. The cells were fixed with 100% methanol (5min) and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated with ab185032 at 1/50 dilution overnight at +4°C (shown in green). AlexaFluor®350 WGA was used at a 1/200 dilution and incubated for 1h with the cells, to label plasma membranes (shown in blue). Nuclear DNA was labelled in red with 1.25 µM DRAQ5™ ([ab108410](#)).



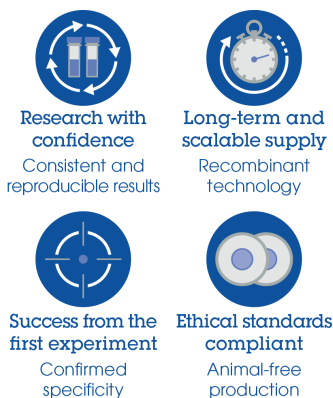
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker (ab185032)

Immunohistochemistry analysis of paraffin-embedded human bladder cancer tissue sections labelling Cytokeratin 17 with ab185032 at 1/100 dilution. The section was incubated with ab185032 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®. Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 40 mins.

Membrane staining on human bladder cancer tissue. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Negative Control: The negative control is PBS.

Why choose a recombinant antibody?



Alexa Fluor® 488 Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker (ab185032)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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