abcam

Product datasheet

Anti-Cytokeratin 17 antibody - Cytoskeleton Marker ab53707

★★★★★ **2 Abreviews**   **36 References**   3 Images

Overview

Product name	Anti-Cytokeratin 17 antibody - Cytoskeleton Marker
Description	Rabbit polyclonal to Cytokeratin 17 - Cytoskeleton Marker
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, WB, IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide derived from human Cytokeratin 17.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS
	Without Mg+2 and Ca+2
Purity	Immunogen affinity purified
Purification notes	ab53707 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee   Our **Abpromise guarantee** covers the use of ab53707 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
ICC/IF	★★★★★ (1)	Use a concentration of 1 µg/ml.
WB		1/500 - 1/1000. Detects a band of approximately 48 kDa (predicted molecular weight: 48 kDa).
IHC-P		1/50 - 1/100.

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 onchyogryposis (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.
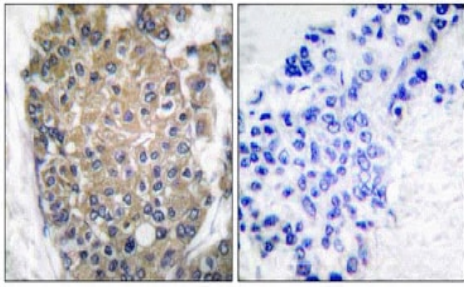
Sequence similarities   Belongs to the intermediate filament family.

Cellular localization   Cytoplasm.

Images

ab53707 at 1/50 dilution staining Cytokeratin 17 in human breast carcinoma by Immunohistochemistry, Paraffin embedded tissue, in the absence or presence of the immunising peptide.
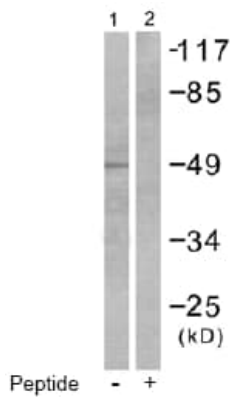
Peptide   -   +

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 17 antibody - Cytoskeleton Marker (ab53707)
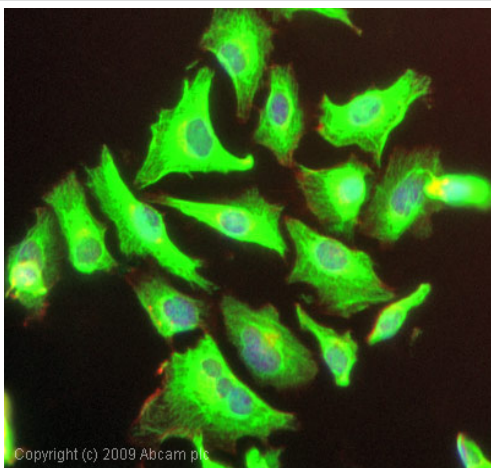

All lanes : Anti-Cytokeratin 17 antibody - Cytoskeleton Marker (ab53707) at 1/500 dilution

Lane 1 : HuvEc cell extract
Lane 2 : HuvEc cell extract with immunising peptide

Predicted band size: 48 kDa
Observed band size: 48 kDa

Western blot - Anti-Cytokeratin 17 antibody - Cytoskeleton Marker (ab53707)

ICC/IF image of ab53707 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab53707, 1μg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43μM.

Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 17 antibody - Cytoskeleton Marker (ab53707)

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