Product datasheet

Anti-Cytokeratin 17 antibody ab53707

Overview

Product name: Anti-Cytokeratin 17 antibody
Description: Rabbit polyclonal to Cytokeratin 17
Host species: Rabbit
Specificity: ab53707 detects endogenous levels of total Cytokeratin 17 protein.
Tested applications: Suitable for: ICC/IF, WB, IHC-P, ELISA
Species reactivity: Reacts with: Mouse, Rat, Human
Immunogen: Synthetic peptide derived from human Cytokeratin 17.
Positive control: Human breast carcinoma tissue; HuvEc cell extracts.

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

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.
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
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.

**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.
Please note: All products are “FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES”

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