abcam

Product datasheet

Anti-Cytokeratin antibody [MNF116] ab756

★★★★★ 2 Abreviews 12 References 5 Images

Overview

Product name	Anti-Cytokeratin antibody [MNF116]
Description	Mouse monoclonal [MNF116] to Cytokeratin
Host species	Mouse
Tested applications	**Suitable for:** IHC-Fr, IHC-P, Flow Cyt, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Tissue, cells or virus corresponding to Cytokeratin. Crude extract of splenic cells from a nude mouse engrafted with MCF-7 cells.
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 +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: Tissue culture supernatant, 1% BSA
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	MNF116
Isotype	IgG1
Light chain type	kappa

Applications

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The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab756 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-Fr	★★★★★ (1)	Use at an assay dependent concentration.
IHC-P	★★★★☆ (1)	Use at an assay dependent concentration. This antibody may be diluted to a titer of 1:25-1:50 in an ABC method. Staining Protocol: We suggest an incubation period of 30-60 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation conditions and antibody dilutions should be determined by the user. Enzymatic antigen retrieval of paraffin
Flow Cyt		Use 1µg for 10^6 cells. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.

Target

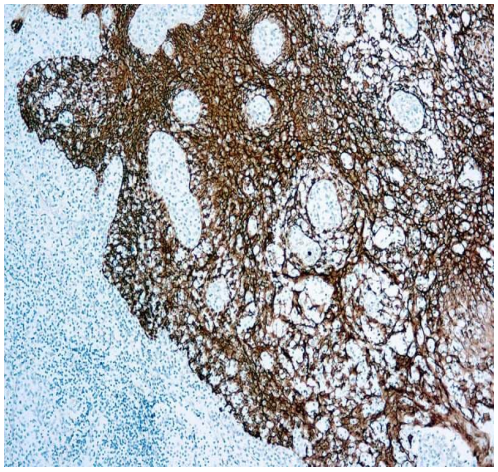
Function May regulate the activity of kinases such as PKC and SRC via binding to integrin beta-1 (ITB1) and the receptor of activated protein kinase C (RACK1/GNB2L1).

Tissue specificity The source of this protein is neonatal foreskin. The 67-kDa type II keratins are expressed in terminally differentiating epidermis.

Involvement in disease Defects in KRT1 are a cause of bullous congenital ichthyosiform erythroderma (BCIE) [MIM:113800]; also known as epidermolytic hyperkeratosis (EHK) or bullous erythroderma ichthyosiformis congenita of Brocq. BCIE is an autosomal dominant skin disorder characterized by widespread blistering and an ichthyotic erythroderma at birth that persist into adulthood. Histologically there is a diffuse epidermolytic degeneration in the lower spinous layer of the epidermis. Within a few weeks from birth, erythroderma and blister formation diminish and hyperkeratoses develop.
Defects in KRT1 are the cause of ichthyosis hystrix Curth-Macklin type (IHCM) [MIM:146590]. IHCM is a genodermatosis with severe verrucous hyperkeratosis. Affected individuals manifest congenital verrucous black scale on the scalp, neck, and limbs with truncal erythema, palmoplantar keratoderma and keratoses on the lips, ears, nipples and buttocks.
Defects in KRT1 are a cause of palmoplantar keratoderma non-epidermolytic (NEPPK) [MIM:600962]. NEPKK is a dermatological disorder characterized by focal palmoplantar keratoderma with oral, genital, and follicular lesions.
Defects in KRT1 are a cause of ichthyosis annular epidermolytic (AEI) [MIM:607602]; also known as cyclic ichthyosis with epidermolytic hyperkeratosis. AEI is a skin disorder resembling bullous congenital ichthyosiform erythroderma. Affected individuals present with bullous ichthyosis in early childhood and hyperkeratotic lichenified plaques in the flexural areas and extensor surfaces at later ages. The feature that distinguishes AEI from BCIE is dramatic episodes of flares of annular polycyclic plaques with scale, which coalesce to involve most of the body surface and can persist for several weeks or even months.
Defects in KRT1 are the cause of palmoplantar keratoderma striate type 3 (SPPK3)

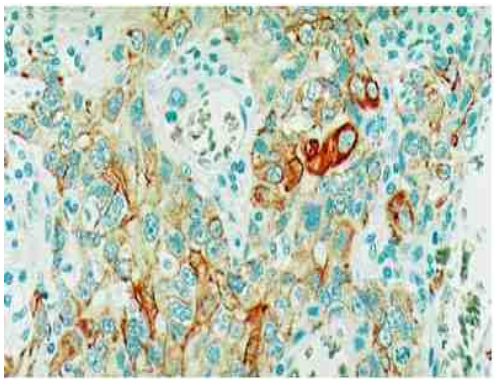
	[MIM:607654]; also known as keratosis palmoplantaris striata III. SPPK3 is a dermatological disorder affecting palm and sole skin where stratum corneum and epidermal layers are thickened. There is no involvement of non-palmoplantar skin, and both hair and nails are normal.
Sequence similarities	Belongs to the intermediate filament family.
Post-translational modifications	Undergoes deimination of some arginine residues (citrullination).
Cellular localization	Cell membrane. Located on plasma membrane of neuroblastoma NMB7 cells.

Images



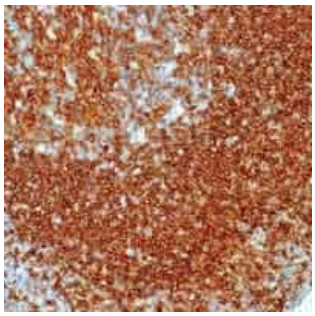
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin antibody [MNF116] (ab756)

Formalin fixed paraffin embedded human tonsil tissue, staining Cytokeratin with ab756 in immunohistochemical analysis



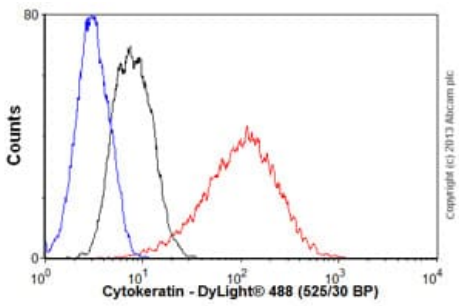
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin antibody [MNF116] (ab756)

Formalin fixed paraffin embedded human lung carcinoma stained with Cytokeratin using ABC and AEC chromogen.



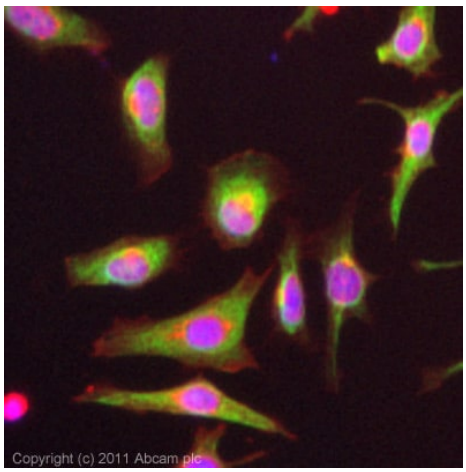
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin antibody [MNF116] (ab756)

ab756 staining human tonsil by IHC-P.



Flow Cytometry - Anti-Cytokeratin antibody [MNF116] (ab756)

Overlay histogram showing MCF7 cells stained with ab756 (red line). The cells were fixed with 4% paraformaldehyde (10 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 (ab756, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin antibody [MNF116] (ab756)

This image was produced with **ab82612**, which is the same as ab756 except for the buffer.

ICC/IF image of **ab82612** stained HeLa cells. The cells were 4% formaldehyde (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 (**ab82612**, neat) overnight at +4°C. The secondary antibody (green) was **ab96879** Dylight 488 goat anti-mouse IgG (H+L) used at a 1/250 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.

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