# abcam

## Product datasheet

# Anti-Cytokeratin 1 antibody ab24643

#### Overview

Product name Anti-Cytokeratin 1 antibody

**Description** Rabbit polyclonal to Cytokeratin 1

Host species Rabbit

Tested applications Suitable for: WB, ICC/IF, IHC-P, IHC-Fr

Species reactivity Reacts with: Mouse, Rat

Immunogen Synthetic peptide - sequence derived from the C-terminus of the mouse keratin 1 protein,

VKTVSTYSRGTK

.

Run BLAST with

Run BLAST with

### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**Storage buffer** Preservative: 0.03% Thimerosal (merthiolate)

Constituent: PBS

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab24643 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application A	Abreviews	Notes
WB 🖠	<b>★★★★</b> <u>(1)</u>	1/1000. Predicted molecular weight: 67 kDa.
ICC/IF		Use at an assay dependent concentration.

1

Application	Abreviews	Notes
IHC-P	<b>★★★★★ (2)</b>	1/500.
IHC-Fr	<b>★★★☆☆(1)</b>	1/500.

#### **Target**

**Function** 

May regulate the activity of kinases such as PKC and SRC via binding to integrin beta-1 ( $\Pi$ B1) 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.

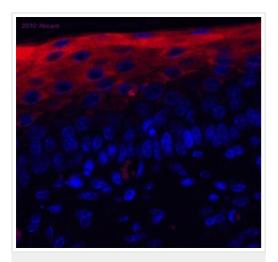
Post-translational modifications

 $\label{thm:condition} \mbox{Undergoes deimination of some arginine residues (citrullination)}.$ 

**Cellular localization** 

Cell membrane. Located on plasma membrane of neuroblastoma NMB7 cells.

#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 1 antibody (ab24643)

This image is courtesy of an anonymous Abreview.

ab24643 staining Cytokeratin 1 in Mouse dorsal skin tissue section by Immunohistochemistry (Formalin/ PFA-fixed paraffinembedded tissue sections). The sections were 10% neutral buffered formalin fixed, permeabilized in PBS (0.1% Triton) and blocked in 10% serum for 1 hour at 25°C to block non-specific protein-protein interactions. The primary antibody was diluted 1/500 in PBS buffer (10% Goat serum in 0.1% Triton) and incubated with sample for 1 hour. The secondary antibody (red) was Alexa Fluor® 594 conjugated Goat polyclonal to rabbit IgG used at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue).

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- · We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

#### Terms and conditions

Guarantee only valid for products bought direct from Abcam or one of our authorized distributors