



Product datasheet

Anti-Cytokeratin 1 antibody [LHK1] - BSA and Azide free ab270280

2 Images

Overview

Product name	Anti-Cytokeratin 1 antibody [LHK1] - BSA and Azide free
Description	Mouse monoclonal [LHK1] to Cytokeratin 1 - BSA and Azide free
Host species	Mouse
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human Cytokeratin 1 aa 600 to the C-terminus (C terminal). Database link: P04264  Run BLAST with  Run BLAST with
Positive control	IHC-P: Human skin and cervix tissue.
General notes	<p>ab270280 is a carrier free version of ab270243.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>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.</p> <p>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</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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A/G purified
Purification notes	Purified from bioreactor concentrate.
Clonality	Monoclonal
Clone number	LHK1
Isotype	IgG2a
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab270280 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		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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	<p>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.</p> <p>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.</p> <p>Defects in KRT1 are a cause of palmoplantar keratoderma non-epidermolytic (NEPPK) [MIM:600962]. NEPPK is a dermatological disorder characterized by focal palmoplantar keratoderma with oral, genital, and follicular lesions.</p> <p>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</p>

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.

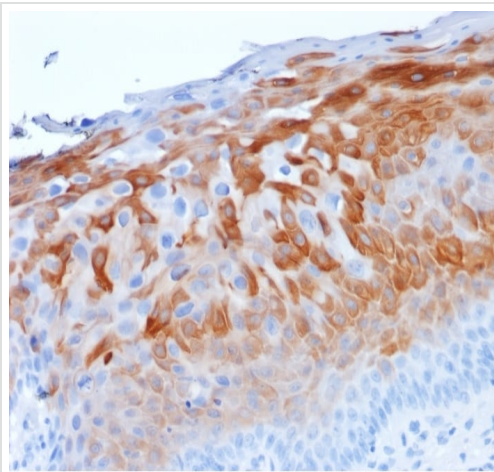
Post-translational modifications

Undergoes deimination of some arginine residues (citrullination).

Cellular localization

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

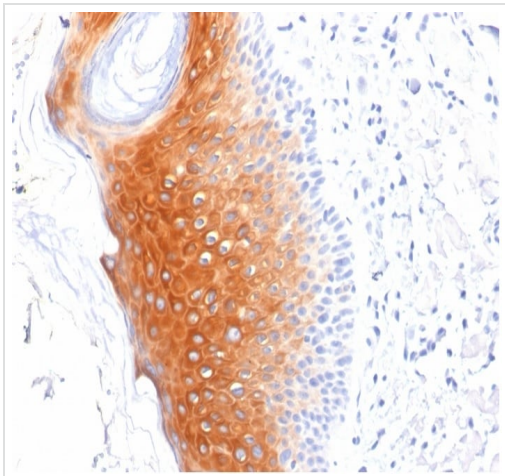
Images



Formalin-fixed, paraffin-embedded human cervix tissue stained for Cytokeratin 1 using [ab270243](#) at 2 µg/ml in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide ([ab270243](#)).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 1+10+11 antibody [LHK1] - BSA and Azide free ([ab270280](#))



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 1+10+11 antibody [LHK1] - BSA and Azide free (ab270280)

Formalin-fixed, paraffin-embedded human skin stained for Cytokeratin 1 using **ab270243** at 2 µg/ml in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (**ab270243**).

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