abcam

Product datasheet

Anti-Cytokeratin 14 antibody [LL002] ab7800

KO 評価済

27 Abreviews 228 References 画像数 8

製品の概要

製品名	Anti-Cytokeratin 14 antibody [LL002]
製品の詳細	Mouse monoclonal [LL002] to Cytokeratin 14
由来種	Mouse
特異性	This antibody labels the basal layer of stratifying squamous and non-squamous epithelia. The staining pattern iscytoplasmic. It recognizes basal cell carcinomas and squamous cell carcinomas.
アプリケーション	**適用あり:** ICC/IF, WB, IHC-P
種交差性	**交差種:** Human **交差が予測される動物種:** Mouse, Rat
免疫原	Synthetic peptide corresponding to Human Cytokeratin 14 (C terminal). Database link: **P02533**
ポジティブ・コントロール	IHC-P: Human normal skin tissue sections and FFPE A431 cell pellet. ICC/IF: A431 cells. WB: A431 whole cell lysate. Human skin whole tissue lysate
特記事項	This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. 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

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.02% Sodium azide

	Constituents: PBS, 6.97% L-Arginine
精製度	Protein A purified
一次抗体 備考	This antibody labels the basal layer of stratifying squamous and non-squamous epithelia. The staining pattern iscytoplasmic. It recognizes basal cell carcinomas and squamous cell carcinomas.
ポリ/モノ	モノクローナル
クローン名	LL002
アイソタイプ	IgG3
軽鎖の種類	kappa

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab7800の使用に適用されます**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF	★★★★★ (5)	Use a concentration of 0.1 - 1 µg/ml.
WB	★★★★☆ (4)	Use a concentration of 1 µg/ml.
IHC-P	★★★★★ (15)	Use a concentration of 0.1 - 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

ターゲット情報

機能

The nonhelical tail domain is involved in promoting KRT5-KRT14 filaments to self-organize into large bundles and enhances the mechanical properties involved in resilience of keratin intermediate filaments in vitro.

組織特異性

Detected in the basal layer, lowered within the more apically located layers specifically in the stratum spinosum, stratum granulosum but is not detected in stratum corneum. Strongly expressed in the outer root sheath of anagen follicles but not in the germinative matrix, inner root sheath or hair. Found in keratinocytes surrounding the club hair during telogen.

関連疾患

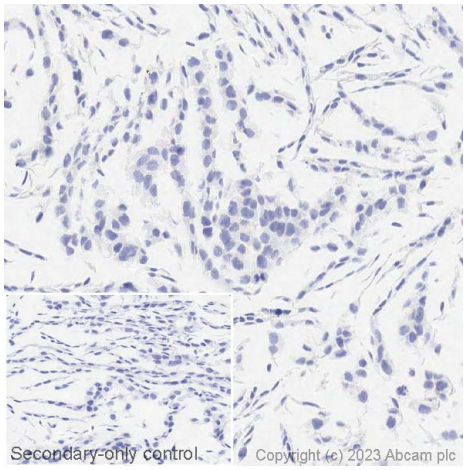
Defects in KRT14 are a cause of epidermolysis bullosa simplex Dowling-Meara type (DM-EBS) [MIM:131760]. DM-EBS is a severe form of intraepidermal epidermolysis bullosa characterized by generalized herpetiform blistering, milia formation, dystrophic nails, and mucous membrane involvement.
Defects in KRT14 are a cause of epidermolysis bullosa simplex Weber-Cockayne type (WC-EBS) [MIM:131800]. WC-EBS is a form of intraepidermal epidermolysis bullosa characterized by blistering limited to palmar and plantar areas of the skin.
Defects in KRT14 are a cause of epidermolysis bullosa simplex Koebner type (K-EBS) [MIM:131900]. K-EBS is a form of intraepidermal epidermolysis bullosa characterized by generalized skin blistering. The phenotype is not fundamentally distinct from the Dowling-Meara type, although it is less severe.
Defects in KRT14 are the cause of epidermolysis bullosa simplex autosomal recessive (AREBS) [MIM:601001]. AREBS is an intraepidermal epidermolysis bullosa characterized by localized

blistering on the dorsal, lateral and plantar surfaces of the feet.
Defects in KRT14 are the cause of Naegeli-Franceschetti-Jadassohn syndrome (NFJS) [MIM:161000]; also known as Naegeli syndrome. NFJS is a rare autosomal dominant form of ectodermal dysplasia. The cardinal features are absence of dermatoglyphics (fingerprints), reticular cutaneous hyperpigmentation (starting at about the age of 2 years without a preceding inflammatory stage), palmoplantar keratoderma, hypohidrosis with diminished sweat gland function and discomfort provoked by heat, nail dystrophy, and tooth enamel defects.
Defects in KRT14 are the cause of dermatopathia pigmentosa reticularis (DPR) [MIM:125595]. DPR is a rare ectodermal dysplasia characterized by lifelong persistent reticulate hyperpigmentation, noncicatricial alopecia, and nail dystrophy.

配列類似性 Belongs to the intermediate filament family.

細胞内局在 Cytoplasm. Nucleus. Expressed in both as a filamentous pattern.

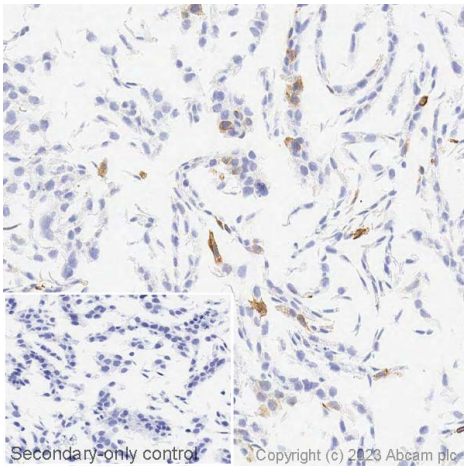
画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [LL002] (ab7800)
Lab

Negative control image: IHC image of Cytokeratin 14 staining in a section of formalin-fixed paraffin-embedded A431 KO cell pellet block performed on a Leica Biosystems BOND® RX instrument. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab7800, 0.1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

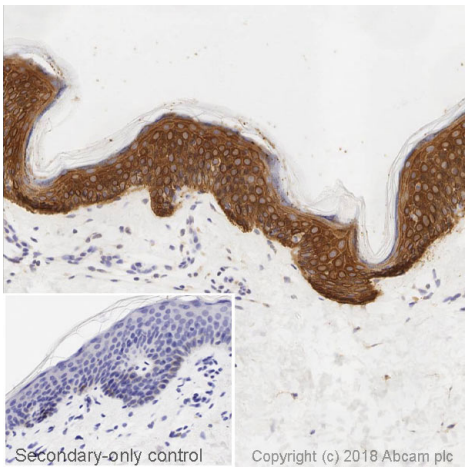


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [LL002] (ab7800)

Lab

IHC image of Cytokeratin 14 staining in a section of formalin-fixed paraffin-embedded A431 WT cell pellet block performed on a Leica Biosystems BOND® RX instrument. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab7800, 0.1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

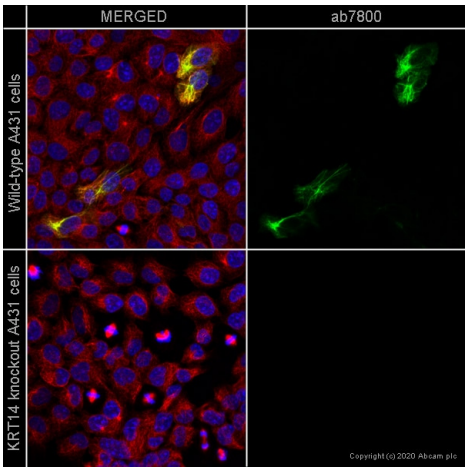


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [LL002] (ab7800)

IHC image of Cytokeratin 14 staining in a section of formalin-fixed paraffin-embedded normal human skin* performed on a Leica BOND™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab7800, 1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

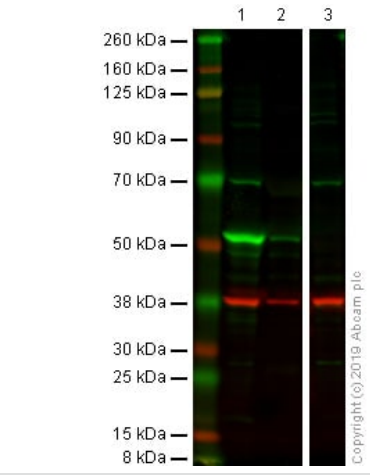
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

**Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre*



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 14 antibody [LL002] (ab7800)

ab7800 staining KRT14 in wild-type A431 cells (top panel) and KRT14 knockout A431 cells (bottom panel). The cells were fixed with 100% methanol (5 min) then permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab7800 at 1µg/ml concentration and **ab6046** (Rabbit polyclonal to beta Tubulin) at 1/1000 dilution overnight at 4°C followed by a further incubation at room temperature for 1h with a goat secondary antibody to mouse IgG (Alexa Fluor® 488) (**ab150117**) at 2 µg/ml (shown in green) and a goat secondary antibody to rabbit IgG (Alexa Fluor® 594) (**ab150080**) at 2 µg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI. Image was taken with a confocal microscope (Leica-Microsystems TCS SP8).



Western blot - Anti-Cytokeratin 14 antibody [LL002] (ab7800)

All lanes :

Lane 1 : A431 whole cell lysate
Lane 2 : Human skin whole tissue lysate
Lane 3 : SH-SY5Y whole cell lysate (negative control)

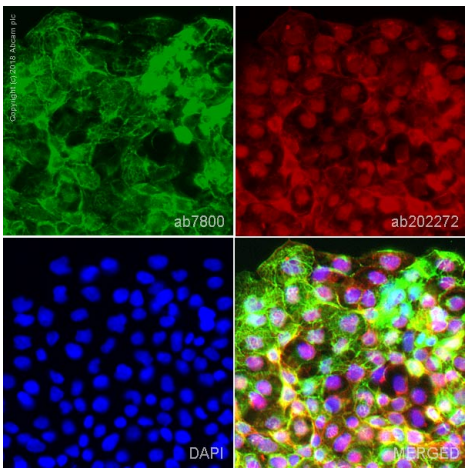
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Observed band size: 55 kDa
Additional bands at: 70 kDa (possible cross reactivity)

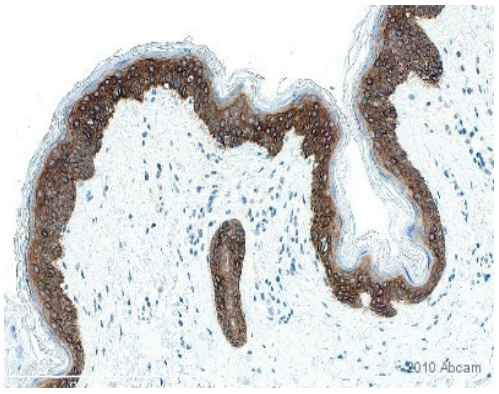
This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 55 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before ab7800 and **ab181602** (Rabbit anti GAPDH), were incubated

overnight at 4°C at a 1ug/ml concentration and 1/20000 dilution respectively. Antibody binding was detected using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 14 antibody [LL002] (ab7800)

ab7800 staining Cytokeratin 14 in A431 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab7800 at 0.1ugml then detected with an Alexa Fluor® 488 goat anti-mouse secondary antibody (**ab150117**) at a 1/1000 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue), and **ab202272**, Rabbit monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [LL002] (ab7800)

This image is courtesy of an anonymous Abreview

ab7800 staining Cytokeratin 14 in Human normal skin tissue sections by IHC-P (Formaldehyde-fixed, Paraffin-embedded sections). Tissue samples were fixed with formaldehyde and blocked with 10% Serum for 30 minutes at 21°C; antigen retrieval was by heat mediation in citrate buffer (pH 6). The sample was incubated with primary antibody (1/100 in PBS + 0.5% Tween-20 + 0.5% BSA)) at 21°C for 30 minutes. An undiluted HRP-conjugated goat polyclonal to mouse IgG was used as secondary antibody.

Western blot - Anti-Cytokeratin 14 antibody [LL002] (ab7800)

This image is courtesy of an anonymous Abreview

Anti-Cytokeratin 14 antibody [LL002] (ab7800) at 2 µg/ml + Human HaCaT whole cell lysate at 30 µg

Secondary

Goat Anti-mouse IgG Polyclonal at 1/20000 dilution

Developed using the ECL technique.

Observed band size: 55 kDa

Exposure time: 1 minute

Blocking Step: 5% Milk for 12 hours at 4°C

Gel Running Conditions: 15%,6V,50min; Reduced; Denaturing

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