

Product datasheet

Anti-Cytokeratin 14 antibody [EPR1612] ab108417

Recombinant **RabMAb**

[12 Images](#)

Overview

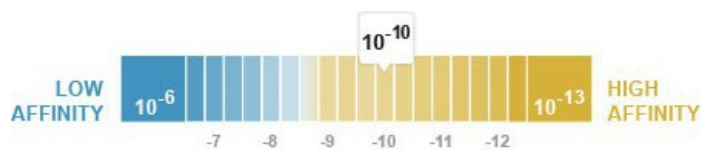
Product name	Anti-Cytokeratin 14 antibody [EPR1612]
Description	Rabbit monoclonal [EPR1612] to Cytokeratin 14
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt, WB, IHC-P, ICC Unsuitable for: IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human Cytokeratin 14. The exact sequence is proprietary.
Positive control	WB: Human skin and A431 cell lysates IHC-P: Human skin, tonsil and squamous cell cervical carcinoma tissues
General notes	A trial size is available to purchase for this antibody. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

This product is a [recombinant rabbit monoclonal antibody](#).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 2.74 x 10 ⁻¹⁰ M



[Learn more about K_D](#)

Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide
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	Constituents: 0.1% BSA, 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR1612
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab108417** 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
Flow Cyt		Use at an assay dependent concentration.
WB		1/10000 - 1/50000. Predicted molecular weight: 52 kDa.
IHC-P		1/250 - 1/500. Antigen retrieval is recommended.
ICC		1/250 - 1/500.

Application notes Is unsuitable for IP.

Target

Function 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.

Tissue specificity 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.

Involvement in disease

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.

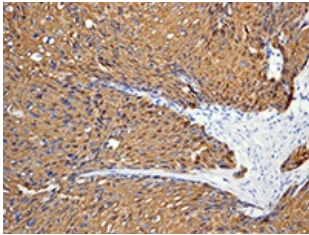
Sequence similarities

Belongs to the intermediate filament family.

Cellular localization

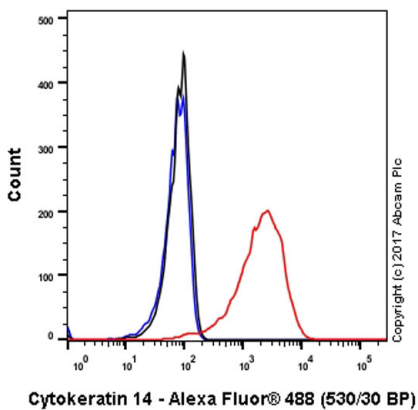
Cytoplasm. Nucleus. Expressed in both as a filamentous pattern.

Images



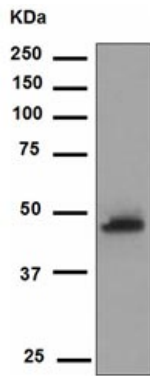
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)

ab108417, at a 1/250 dilution, staining Cytokeratin 14 in paraffin embedded Human squamous cell cervical carcinoma tissue by Immunohistochemistry.



Flow Cytometry - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)

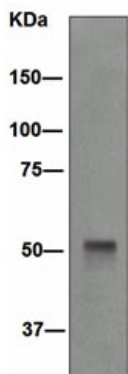
Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labeling Cytokeratin 14 with purified ab108417 at 1:250 dilution(10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488)([ab150077](#))(1:2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black)([ab172730](#)) was used as the isotype control, Cell without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Western blot - Anti-Cytokeratin 14 antibody
[EPR1612] (ab108417)

Anti-Cytokeratin 14 antibody [EPR1612] (ab108417) at 1/10000
dilution + Human skin lysate at 10 μ g

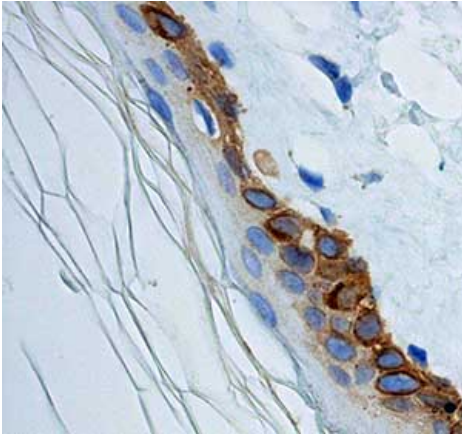
Predicted band size: 52 kDa



Western blot - Anti-Cytokeratin 14 antibody
[EPR1612] (ab108417)

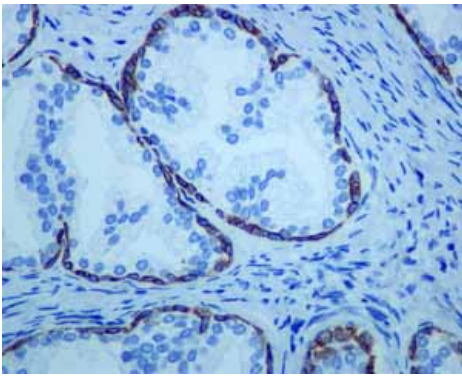
Anti-Cytokeratin 14 antibody [EPR1612] (ab108417) at 1/10000
dilution + A431 cell lysate at 10 μ g

Predicted band size: 52 kDa



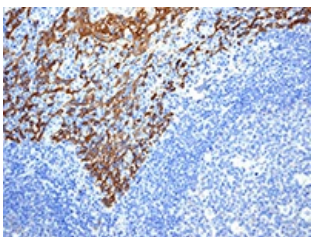
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)

ab108417, at a 1/250 dilution, staining Cytokeratin 14 in paraffin embedded Human skin tissue by Immunohistochemistry.



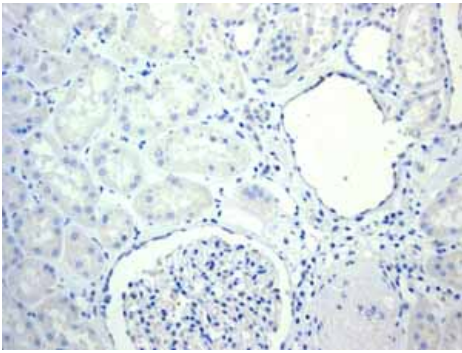
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)

ab108417 showing positive staining in Normal prostate basal epithelium tissue.



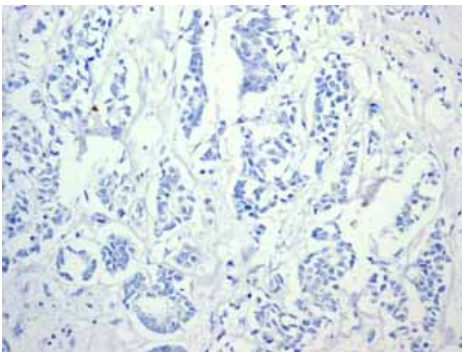
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)

ab108417, at a 1/250 dilution, staining Cytokeratin 14 in paraffin embedded Human tonsil tissue by Immunohistochemistry.



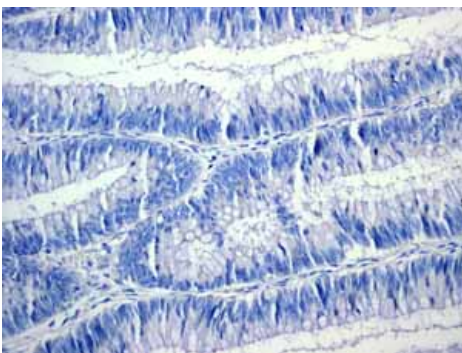
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)

ab108417 showing negative staining in Normal kidney tissue.



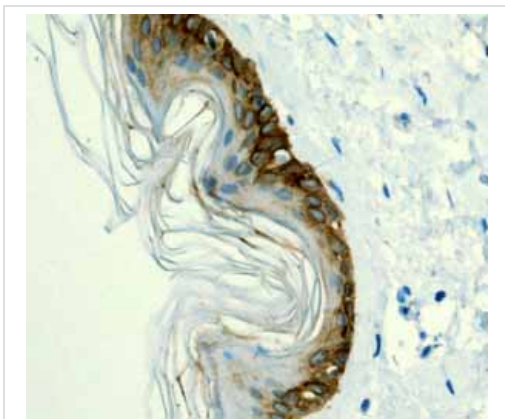
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)

ab108417 showing negative staining in Breast carcinoma tissue.



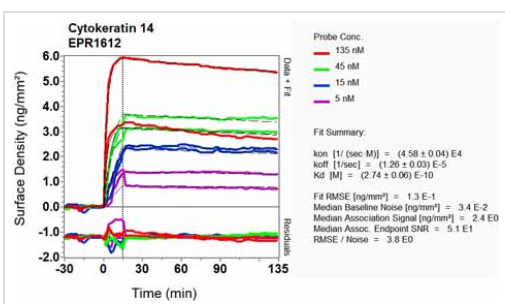
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)

ab108417 showing negative staining in Colonic adenocarcinoma tissue.



ab108417 showing positive staining in Normal skin tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)



Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Other - Anti-Cytokeratin 14 antibody [EPR1612] (ab108417)

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