



CK14+17+42+10 Rabbit pAb

CK14+17+42+10 Rabbit pAb Catalog # AP52071

Product Information

Application WB, IHC-P, IHC-F, IF

Primary Accession
Reactivity
Human
Host
Clonality
Polyclonal
Calculated MW
Physical State
P02533
Human
Puman
Post
Rabbit
Polyclonal
Liquid

Immunogen KLH conjugated synthetic peptide derived from human CK14

Epitope Specificity 251-350/472

Isotype IgG

Purity affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION SIMILARITY

SUBUNIT

Post-translational modifications DISEASE

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Cytoplasm. Nucleus. Note=Expressed in both as a filamentous pattern. Belongs to the intermediate filament family.

Heterotetramer of two type I and two type II keratins. keratin-14 associates with keratin-5. Interacts with TRADD and with keratin filaments. Associates with other type I keratins

with other type I keratins.

A disulfide bond is formed between rather than within filaments and promotes the formation of a keratin filament cage around the nucleus. Epidermolysis bullosa simplex, Dowling-Meara type (DM-EBS) [MIM:131760]: A severe form of intraepidermal epidermolysis bullosa characterized by generalized herpetiform blistering, milia formation, dystrophic nails, and mucous membrane involvement. Note=The disease is caused by mutations affecting the gene represented in this entry. Epidermolysis bullosa simplex, Weber-Cockayne type (WC-EBS) [MIM:131800]: A form of intraepidermal epidermolysis bullosa characterized by blistering limited to palmar and plantar areas of the skin. Note=The disease is caused by mutations affecting the gene represented in this entry. Epidermolysis bullosa simplex, Koebner type (K-EBS) [MIM:131900]: 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. Note=The disease is caused by mutations affecting the gene represented in this entry. Epidermolysis bullosa simplex, autosomal recessive (AREBS) [MIM:601001]: An intraepidermal epidermolysis bullosa characterized by localized blistering on the dorsal, lateral and plantar surfaces of the feet. Note=The disease is caused by mutations affecting the gene represented in this entry. Naegeli-Franceschetti-Jadassohn syndrome (NFJS) [MIM:161000]: 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. Note=The disease is caused by

mutations affecting the gene represented in this entry. Dermatopathia pigmentosa reticularis (DPR) [MIM:125595]: A rare ectodermal dysplasia characterized by lifelong persistent reticulate hyperpigmentation, non-cicatricial alopecia, and nail dystrophy. Variable features include adermatoglyphia, hypohidrosis or hyperhidrosis, and palmoplantar hyperkeratosis. Note=The disease is caused by mutations affecting the gene represented in this entry.

Important Note

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

This gene encodes a member of the keratin family, the most diverse group of intermediate filaments. This gene product, a type I keratin, is usually found as a heterotetramer with two keratin 5 molecules, a type II keratin. Together they form the cytoskeleton of epithelial cells. Mutations in the genes for these keratins are associated with epidermolysis bullosa simplex. At least one pseudogene has been identified at 17p12-p11. [provided by RefSeq].

Additional Information

Gene ID 3861

Other Names Keratin, type I cytoskeletal 14, Cytokeratin-14, CK-14, Keratin-14, K14, KRT14

Target/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.

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name KRT14

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.

Cellular Location Cytoplasm. Nucleus. Note=Expressed in both as a filamentous pattern.

Tissue Location Expressed in the corneal epithelium (at protein level) (PubMed:26758872).

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

(PubMed:9457912). Found in keratinocytes surrounding the club hair during

telogen (PubMed:9457912).

Background

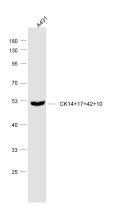
This gene encodes a member of the keratin family, the most diverse group of intermediate filaments. This

gene product, a type I keratin, is usually found as a heterotetramer with two keratin 5 molecules, a type II keratin. Together they form the cytoskeleton of epithelial cells. Mutations in the genes for these keratins are associated with epidermolysis bullosa simplex. At least one pseudogene has been identified at 17p12-p11. [provided by RefSeq].

References

Marchuk D.,et al.Cell 39:491-498(1984).
Marchuk D.,et al.Proc. Natl. Acad. Sci. U.S.A. 82:1609-1613(1985).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Zody M.C.,et al.Nature 440:1045-1049(2006).
Hanukoglu I.,et al.Cell 31:243-252(1982).

Images



Sample:
A431(Human) Cell Lysate at 30 ug
Primary: Anti-CK14+17+42+10 (AP52071) at 1/1000
dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000
dilution
Predicted band size: 52 kD
Observed band size: 52 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.