Cytokeratin 14 (PT0630R) PT® Rabbit mAb

CatalogNo: YM8439 Recombinant

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat,

Applications
- WB,IHC,IF,IP,ELISA

MW
- 52kD (Calculated)

52kD (Observed)

Isotype
- IgG,Kappa

Recommended Dilution Ratios

IHC 1:200-1:1000
WB 1:2000-1:10000
IF 1:200-1:1000
ELISA 1:5000-1:20000
IP 1:50-1:200

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Basic Information

Clonality	Monoclonal
Clone Number	PT0630R

Immunogen Information

Specificity	Endogenous

Target Information

Gene name KRT14

Protein Name Keratin, type I cytoskeletal 14 (Cytokeratin-14) (CK-14) (Keratin-14) (K14)

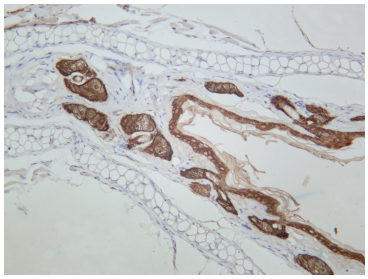
Organism	Gene ID	UniProt ID
Human	3861;	P02533;

Cellular Localization Cytoplasm

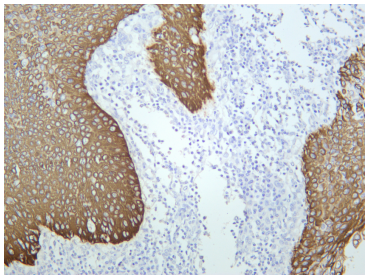
Tissue specificity Expressed in the corneal epithelium (at protein level) (PubMed:26758872). Detected in the basal layer, lowered within the more apically located layers specifically in the stratum spinosum, stratum granulosum but is not detected in stratum corneum. Strongly expressed in the outer root 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).

Function 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.,Disease: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, althought it is less severe.,Disease: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.,Disease:Defects in KRT14 are the cause of dermatopathia pigmentosa reticularis (DPR) [MIM:125595]. DPR is a rare ectodermal dysplasia characterized by lifelong persistant reticulate hyperpigmentation, noncicatricial alopecia, and nail dystrophy.,Disease: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.,Disease: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.,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.,miscellaneous:There are two types of cytoskeletal and microfibrillar keratin: I (acidic; 40-55 kDa) and II (neutral to basic; 56-70 kDa).,similarity:Belongs to the intermediate filament family.,subcellular location:Expressed in both as a filamentous pattern.,subunit: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.,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.,

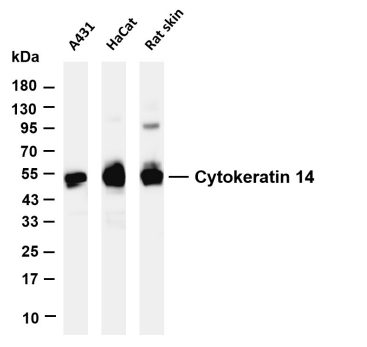
Validation Data



Mouse skin was stained with anti-Cytokeratin 14 rabbit antibody



Human cervical squamous cell carcinoma was stained with anti-Cytokeratin 14 rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Cytokeratin 14 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A431 Lane 2: HaCat Lane 3: Rat skin Predicted band size: 52kDa Observed band size: 52kDa

Contact information

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Please scan the QR code to access additional product information:
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