

Rabbit Anti-Keratin 1 antibody

SL60615R

Product Name Keratin 1

Chinese Name 细胞角蛋白 1 抗体

Alias Cytokeratin-1; 67 kDa cytokeratin; CK 1; CK1; Cytokeratin1; EHK1; Hair alpha protein; K 1; K1; Keratin 1; Keratin type II cytoskeletal 1; Keratin1; KRT 1; KRT1A; K2C1_HUMAN; Keratin, type II cytoskeletal 1; Cytokeratin-1; CK-1; Keratin-1; Type-II keratin Kb1.

Research Area Tumour Signal transduction Stem cells Kinases and Phosphatases

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human

Applications IHC-P=1:400-800,IHC-F=1:400-800,IF=1:100-500(Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 70kDa

Cellular localization cytoplasmic The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human Keratin 1

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

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

PubMed [PubMed](#)

The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is specifically expressed in the spinous and granular layers of the epidermis with family member KRT10 and mutations in these genes have been associated with bullous congenital ichthyosiform erythroderma. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq].

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). In complex with C1QBP is a high affinity receptor for kininogen-1/HMWK.

Subunit:

Heterotetramer of two type I and two type II keratins. Keratin-1 is generally associated with keratin-10. Interacts with ITGB1 in the presence of GNB2L1 and SRC, and with GNB2L1. Interacts with C1QBP; the association represents a cell surface kininogen receptor.

Subcellular Location:

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

**Product
Detail**

Tissue Specificity:

The source of this protein is neonatal foreskin. The 67-kDa type II keratins are expressed in terminally differentiating epidermis. Post-translational modifications : Undergoes deimination of some arginine residues (citrullination).

Post-translational modifications:

Undergoes deimination of some arginine residues (citrullination).

DISEASE:

Defects in KRT1 are a cause of epidermolytic hyperkeratosis (EHK) [MIM:113800]. 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.

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.

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.

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 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.

Similarity:

Belongs to the intermediate filament family.

SWISS:

P04264

Gene ID:

3848

Database links:

[Entrez Gene: 3848](#) Human

[Entrez Gene: 16678](#) Mouse

[Entrez Gene: 300250](#) Rat

[Omim: 139350](#) Human

[SwissProt: P04264](#) Human

[SwissProt: P04104](#) Mouse

[SwissProt: Q6IMF3](#) Rat

[Unigene: 80828](#) Human

[Unigene: 183137](#) Mouse

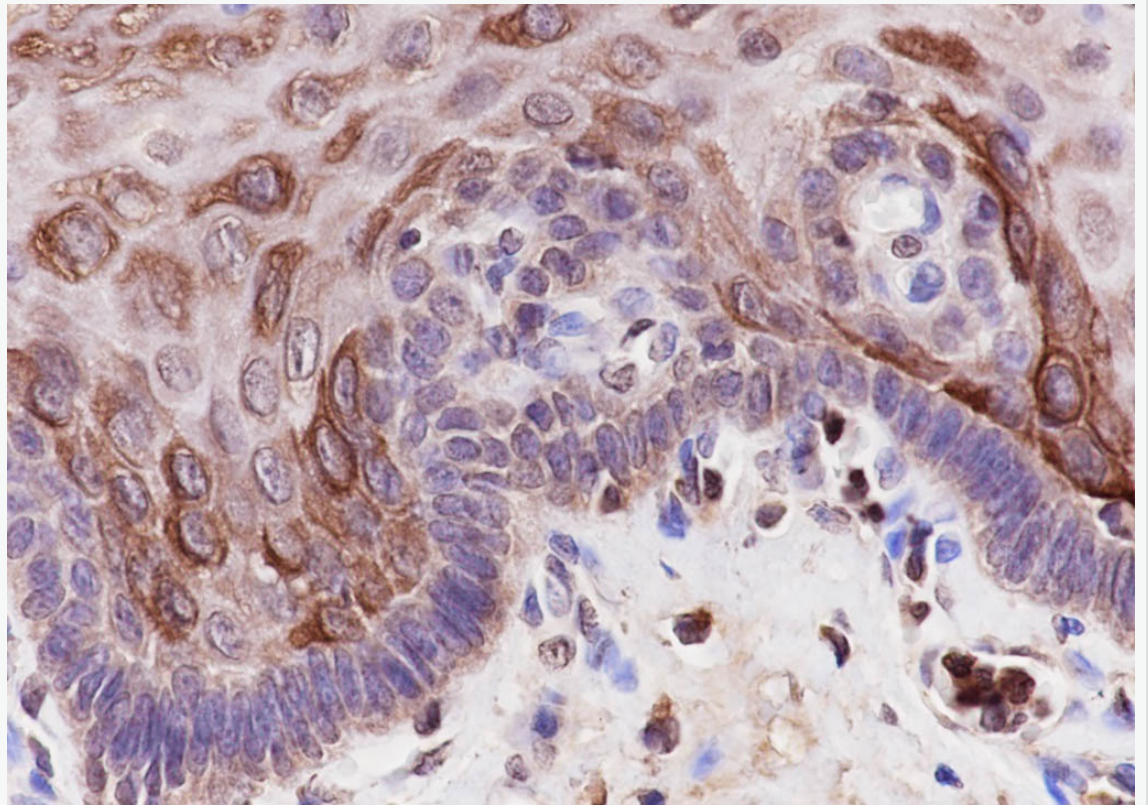
[Unigene: 31789](#) Rat

结构蛋白 (Structural Proteins)

细胞角蛋白常用于 Tumour 细胞的分化、增殖及转移方面的研究。有学者认为：在

TumourCell differentiation 过程中有细胞角蛋白的表达，把细胞角蛋白作为 TumourStem cells 的 Maker。阳性部位：主要在胞浆。CK119， CK8， CK19 同源。

**Product
Picture**



Tissue: Human esophagus

Section type: Formalin fixed & Paraffin -embedded section

Retrieval method: High temperature and high pressure

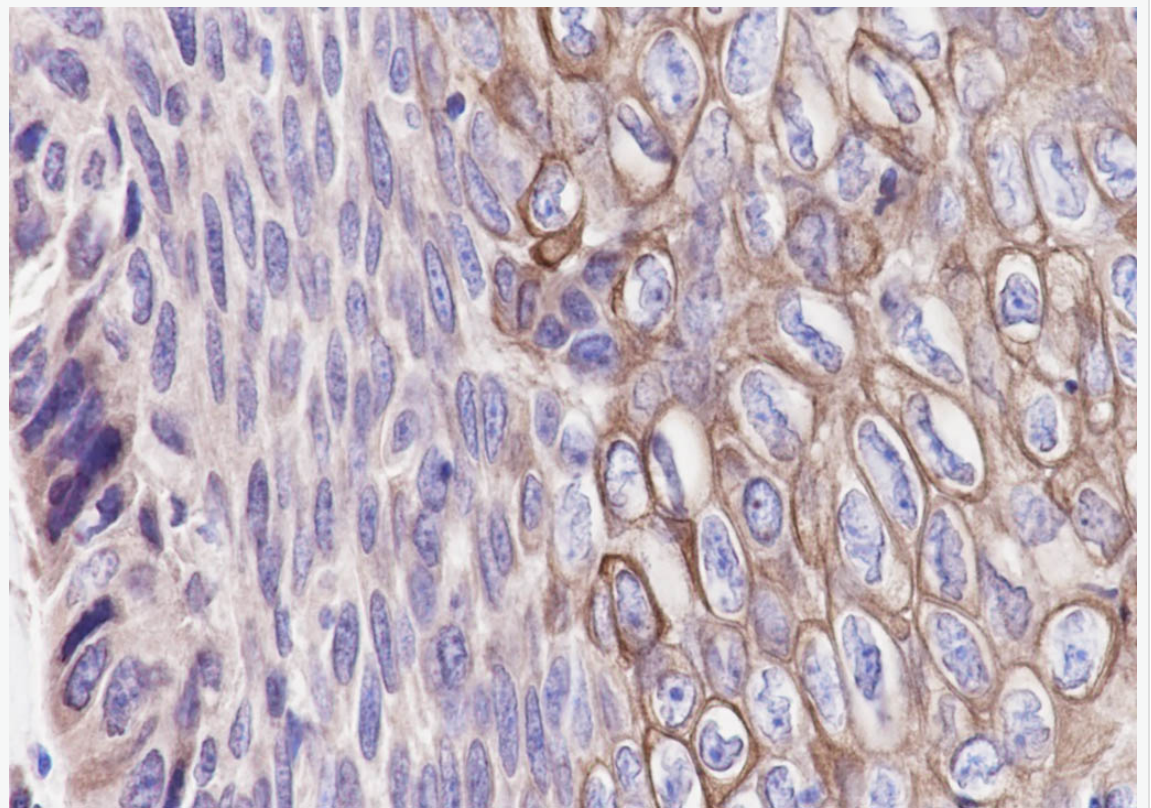
Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:50

Primary ab incubation condition: 1 hour at room temperature

Secondary ab: SP Kit(Rabbit) (sp-0023)

Counter stain: Hematoxylin (Blue)

Comment: Color brown is the positive signal for SL60615R



Tissue: Human esophagus cancer

Section type: Formalin fixed & Paraffin -embedded section

Retrieval method: High temperature and high pressure

Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:50

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