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KRT1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9695c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P04264
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18411
Calculated MW	66039
Antigen Region	415-443

Additional Information

Gene ID	3848
Other Names	Keratin, type II cytoskeletal 1, 67 kDa cytokeratin, Cytokeratin-1, CK-1, Hair alpha protein, Keratin-1, K1, Type-II keratin Kb1, KRT1, KRTA
Target/Specificity	This KRT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 415-443 amino acids from the Central region of human KRT1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KRT1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KRT1 (HGNC:6412)
Synonyms	KRTA

Function	Structural component of intermediate filaments in suprabasal keratinocytes of stratified epithelia. Forms heteropolymers with a type I keratin, assembling into keratin intermediate filament networks that provide mechanical strength and structural stability to differentiating epidermal cells (PubMed:1381288). May regulate the activity of kinases such as PKC and SRC by interacting with integrin beta-1 (ITB1) and the receptor of activated protein C kinase 1 (RACK1) (PubMed:17956333, PubMed:21544310). In complex with C1QBP, acts as a high-affinity receptor for kininogen-1 (HMWK) (PubMed:21544310).
Cellular Location	Cell membrane. Cytoplasm
Tissue Location	The source of this protein is neonatal foreskin. The 67-kDa type II keratins are expressed in terminally differentiating epidermis

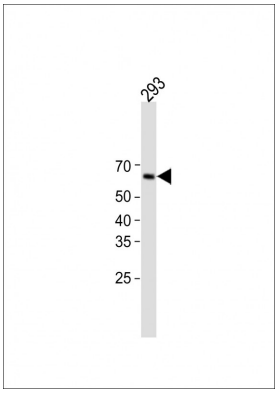
Background

KRT1 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.

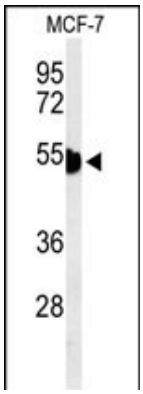
References

Labudova, M., et al. J. Virol. 83(16):7842-7849(2009)
Barcelos, A.C., et al. J. Cutan. Pathol. 36(6):647-654(2009)
Grimberg, G., et al. Br. J. Dermatol. 160(2):446-449(2009)

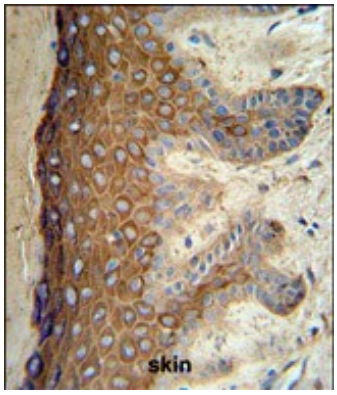
Images



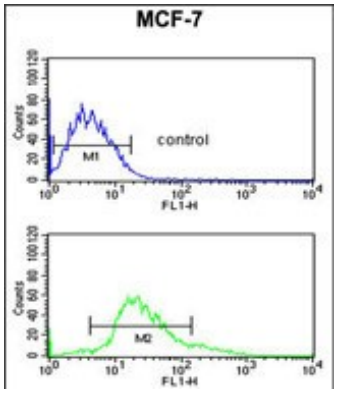
All lanes: Anti-KRT1 Antibody (Center) at 1:1000 dilution + 293 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 66KDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of KRT1 Antibody (Center) (Cat. #AP9695c) in MCF-7 cell line lysates (35ug/lane). KRT1 (arrow) was detected using the purified Pab.



KRT1 Antibody (Center) (Cat. #AP9695c) IHC analysis in formalin fixed and paraffin embedded skin tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the KRT1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



KRT1 Antibody (Center) (Cat. #AP9695c) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Differential miRNA expression profiles in human keratinocytes in response to protein kinase C inhibitor.

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