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Kallikrein 7 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6326a

Product Information

Application	WB, IHC-P, E
Primary Accession	P49862
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB6117
Calculated MW	27525
Antigen Region	67-97

Additional Information

Gene ID	5650
Other Names	Kallikrein-7, hK7, Serine protease 6, Stratum corneum chymotryptic enzyme, hSCCE, KLK7, PRSS6, SCCE
Target/Specificity	This Kallikrein 7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 67-97 amino acids from the Central region of human Kallikrein 7.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	Kallikrein 7 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLK7
Synonyms	PRSS6, SCCE
Function	May catalyze the degradation of intercellular cohesive structures in the cornified layer of the skin in the continuous shedding of cells from the skin

	surface. Specific for amino acid residues with aromatic side chains in the P1 position. Cleaves insulin A chain at '14-Tyr-|-Gln-15' and insulin B chain at '6-Leu-|-Cys-7', '16-Tyr-|-Leu-17', '25-Phe-|-Tyr-26' and '26-Tyr-|-Thr-27'. Could play a role in the activation of precursors to inflammatory cytokines.
Cellular Location	Secreted. Note=In ovarian carcinoma, secreted and also observed at the apical membrane and in cytoplasm at the invasive front
Tissue Location	Abundantly expressed in the skin and is expressed by keratinocytes in the epidermis. Also expressed in the brain, mammary gland, cerebellum, spinal cord and kidney. Lower levels in salivary glands, uterus, thymus, thyroid, placenta, trachea and testis. Up- regulated in ovarian carcinoma, especially late-stage serous carcinoma, compared with normal ovaries and benign adenomas (at protein level)

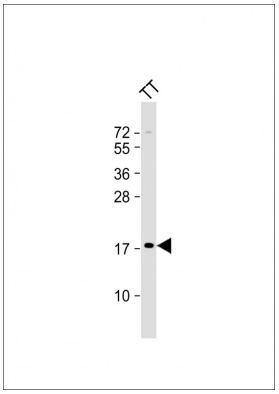
Background

Kallikreins are a subgroup of serine proteases having diverse physiological functions. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers. The KLK7 enzyme is thought to be involved in the proteolysis of intercellular cohesive structures preceding desquamation, which is the shedding of the outermost layer of the epidermis.

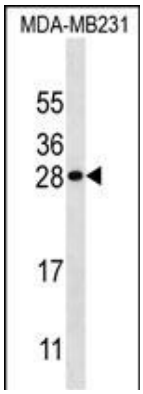
References

Planque, C., et al., Biochem. Biophys. Res. Commun. 329(4):1260-1266 (2005).
Ishida-Yamamoto, A., et al., J. Invest. Dermatol. 124(2):360-366 (2005).
Vasilopoulos, Y., et al., J. Invest. Dermatol. 123(1):62-66 (2004).
Santin, A.D., et al., Gynecol. Oncol. 94(2):283-288 (2004).
Caubet, C., et al., J. Invest. Dermatol. 122(5):1235-1244 (2004).

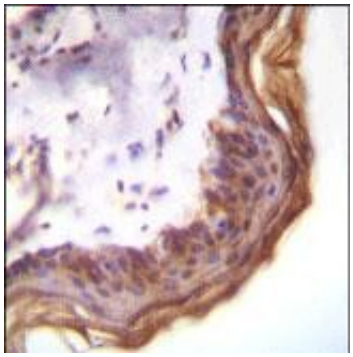
Images



Anti-KLK7-S82 at 1:2000 dilution + TT whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 28 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



KLK7 Antibody (S82) (Cat. #AP6326a) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the KLK7 antibody detected the KLK7 protein (arrow).



Kallikrein 7(KLK7) Antibody (Center) (Cat. #AP6326a)immunohistochemistry analysis in formalin fixed and paraffin embedded human skin tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Kallikrein 7(KLK7) Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.