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KLK8 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14391a

Product Information

Application	WB, IHC-P, E
Primary Accession	O60259
Other Accession	NP_653090.1, NP_653088.1
Reactivity	Human
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34313
Calculated MW	28048
Antigen Region	9-38

Additional Information

Gene ID	11202
Other Names	Kallikrein-8, hK8, Neuropsin, NP, Ovasin, Serine protease 19, Serine protease TADG-14, Tumor-associated differentially expressed gene 14 protein, KLK8, NRPN, PRSS19, TADG14
Target/Specificity	This KLK8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 9-38 amino acids from the N-terminal region of human KLK8.
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	KLK8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLK8
Synonyms	NRPN, PRSS19, TADG14

Function	Serine protease which is capable of degrading a number of proteins such as casein, fibrinogen, kininogen, fibronectin and collagen type IV. Also cleaves L1CAM in response to increased neural activity. Induces neurite outgrowth and fasciculation of cultured hippocampal neurons. Plays a role in the formation and maturation of orphan and small synaptic boutons in the Schaffer-collateral pathway, regulates Schaffer-collateral long-term potentiation in the hippocampus and is required for memory acquisition and synaptic plasticity. Involved in skin desquamation and keratinocyte proliferation. Plays a role in the secondary phase of pathogenesis following spinal cord injury.
Cellular Location	Secreted. Cytoplasm. Note=Shows a cytoplasmic distribution in the keratinocytes
Tissue Location	Isoform 1 is predominantly expressed in the pancreas. Isoform 2 is expressed in adult brain and hippocampus Isoform 1 and isoform 2 are found in fetal brain and placenta. Detected in salivary gland, uterus, thymus, breast, testis and kidney but not in spleen, liver, lung or normal ovarian tissue. Displays an 11.5-fold increase in Alzheimer disease hippocampus compared to controls and is overexpressed in some ovarian carcinomas. Expressed at low levels in normal skin while high levels are found in psoriasis vulgaris, seborrheic keratosis, lichen planus and squamous cell carcinoma skin samples. Expressed in the keratinocytes.

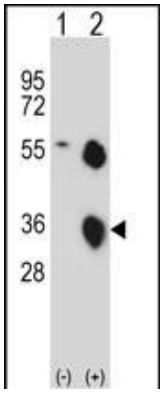
Background

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. This gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. Alternate splicing of this gene results in four transcript variants encoding four different isoforms. The isoforms exhibit distinct patterns of expression that suggest roles in brain plasticity and ovarian cancer.

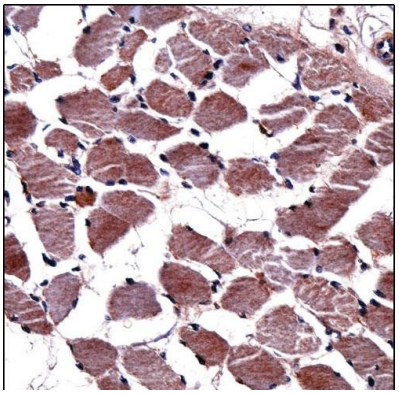
References

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Klein, R.J., et al. Cancer Prev Res (Phila) 3(5):611-619(2010)
Emami, N., et al. Biol. Chem. 390(9):921-929(2009)
Brattsand, M., et al. J. Invest. Dermatol. 129(7):1656-1665(2009)
Darling, M.R., et al. Head Neck Pathol 2(3):169-174(2008)

Images



Western blot analysis of KLK8 (arrow) using rabbit polyclonal KLK8 Antibody (N-term) (Cat. #AP14391a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the KLK8 gene.



KLK8 Antibody (N-term) (AP14391a)immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of KLK8 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Identifying Candidate Biomarkers for Pleomorphic Adenoma: A Case-Control Study.

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