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Kallikrein 6 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6325A

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q92876
Reactivity	Human
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB6114
Calculated MW	26856
Antigen Region	1-30

Additional Information

Gene ID	5653
Other Names	Kallikrein-6, 3421-, Neurosin, Protease M, SP59, Serine protease 18, Serine protease 9, Zyme, KLK6, PRSS18, PRSS9
Target/Specificity	This Kallikrein 6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human Kallikrein 6.
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	Kallikrein 6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLK6
Synonyms	PRSS18, PRSS9

Function	Serine protease which exhibits a preference for Arg over Lys in the substrate P1 position and for Ser or Pro in the P2 position. Shows activity against amyloid precursor protein, myelin basic protein, gelatin, casein and extracellular matrix proteins such as fibronectin, laminin, vitronectin and collagen. Degrades alpha-synuclein and prevents its polymerization, indicating that it may be involved in the pathogenesis of Parkinson disease and other synucleinopathies. May be involved in regulation of axon outgrowth following spinal cord injury. Tumor cells treated with a neutralizing KLK6 antibody migrate less than control cells, suggesting a role in invasion and metastasis.
Cellular Location	Secreted. Nucleus, nucleolus. Cytoplasm. Mitochondrion. Microsome. Note=In brain, detected in the nucleus of glial cells and in the nucleus and cytoplasm of neurons. Detected in the mitochondrial and microsomal fractions of HEK-293 cells and released into the cytoplasm following cell stress
Tissue Location	In fluids, highest levels found in milk of lactating women followed by cerebrospinal fluid, nipple aspirate fluid and breast cyst fluid. Also found in serum, seminal plasma and some amniotic fluids and breast tumor cytosolic extracts. Not detected in urine. At the tissue level, highest concentrations found in glandular tissues such as salivary glands followed by lung, colon, fallopian tube, placenta, breast, pituitary and kidney. Not detected in skin, spleen, bone, thyroid, heart, ureter, liver, muscle, endometrium, testis, pancreas, seminal vesicle, ovary, adrenals and prostate. In brain, detected in gray matter neurons (at protein level). Colocalizes with pathological inclusions such as Lewy bodies and glial cytoplasmic inclusions. Overexpressed in primary breast tumors but not expressed in metastatic tumors.

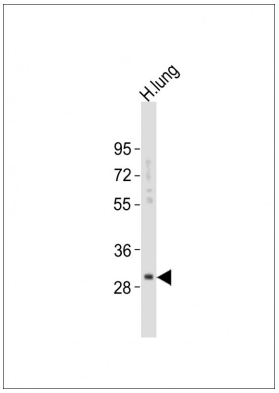
Background

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 KLK6 enzyme is regulated by steroid hormones. In tissue culture, the enzyme has been found to generate amyloidogenic fragments from the amyloid precursor protein, suggesting a potential for involvement in Alzheimer's disease.

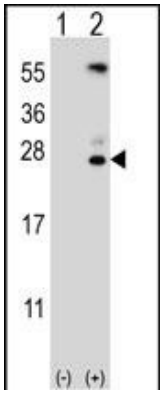
References

Christophi, G.P., et al., J. Neurochem. 91(6):1439-1449 (2004). Bayes, A., et al., Biol. Chem. 385(6):517-524 (2004). Pampalakis, G., et al., Biochem. Biophys. Res. Commun. 320(1):54-61 (2004). Ghosh, M.C., et al., Tumour Biol. 25(4):193-199 (2004). Sauter, E.R., et al., Int. J. Cancer 108(4):588-591 (2004).

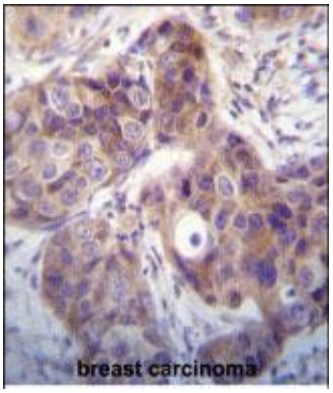
Images



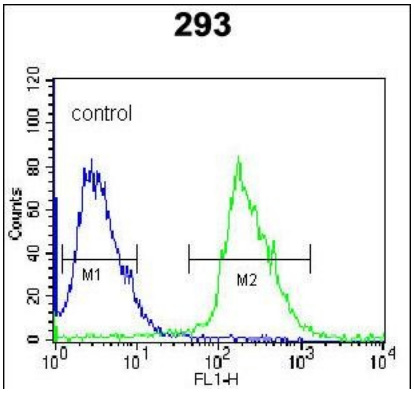
Anti-KLK6 Antibody (A13)at 1:2000 dilution + human lung lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of KLK6 (arrow) using rabbit polyclonal KLK6 Antibody (A13) (Cat. #AP6325a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the KLK6 gene.



Kallikrein 6(KLK6) Antibody (N-term) (Cat. #AP6325a)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Kallikrein 6(KLK6) Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Kallikrein 6 (KLK6) Antibody (N-term) (Cat. #AP6325a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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