

## Kallikrein 6 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6325b

## **Specification**

# Kallikrein 6 Antibody (Center) - Product Information

Application WB, IHC-P, FC,E

Primary Accession
Reactivity
Human
Host
Clonality
Isotype
Calculated MW
Antigen Region

Q92876
Human
Rabbit
Polyclonal
Rabbit IgG
26856
Antigen Region

# Kallikrein 6 Antibody (Center) - 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 126-156 amino acids from the Central region of human Kallikrein 6.

# **Dilution**

WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

#### 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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# Kallikrein 6 Antibody (Center) - 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.

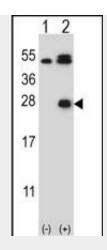
## Kallikrein 6 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

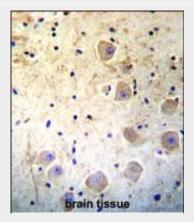
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Kallikrein 6 Antibody (Center) - Images

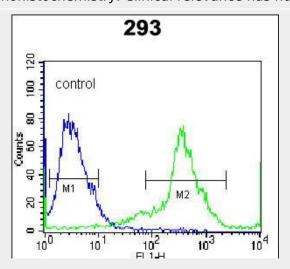




Western blot analysis of KLK6 (arrow) using rabbit polyclonal KLK6 Antibody (L141) (Cat. #AP6325b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the KLK6 gene.

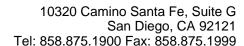


Kallikrein 6(KLK6) Antibody (Center) (Cat. #AP6325b)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Kallikrein 6(KLK6) Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



Kallikrein 6 (KLK6) Antibody (Center) Antibody (Cat. #AP6325b) 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.

# Kallikrein 6 Antibody (Center) - 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.

# Kallikrein 6 Antibody (Center) - 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).