

**Anti-Kallikrein-6 Antibody**  
**Catalog # ABO11076****Specification**

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**Anti-Kallikrein-6 Antibody - Product Information**

Application	WB, IHC-P, ICC
Primary Accession	<a href="#">Q92876</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Kallikrein-6(KLK6) detection. Tested with WB, IHC-P, ICC in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Kallikrein-6 Antibody - Additional Information**

**Gene ID** 5653

**Other Names**

Kallikrein-6, 3.4.21.-, Neurosin, Protease M, SP59, Serine protease 18, Serine protease 9, Zyme, KLK6, PRSS18, PRSS9

**Calculated MW**

26856 MW KDa

**Application Details**

Immunocytochemistry , 0.5-1 µg/ml, Human, -<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Secreted. Nucleus, nucleolus. Cytoplasm. Mitochondrion. Microsome. 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 Specificity**

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. .

**Protein Name**

Kallikrein-6

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Kallikrein 6(227-244aa YTNVCRYTNWIKTIQAK).

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the peptidase S1 family. Kallikrein subfamily.

**Anti-Kallikrein-6 Antibody - 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**

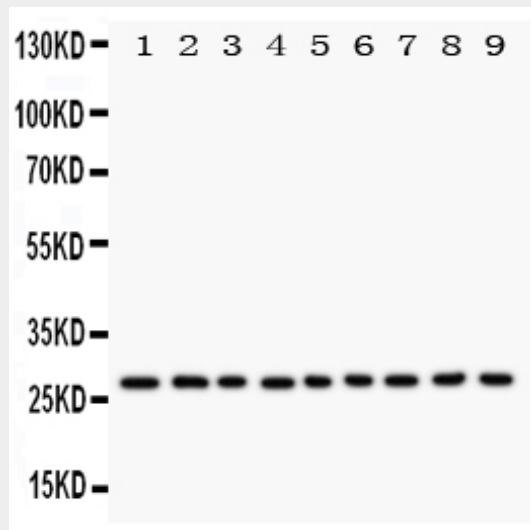
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## Anti-Kallikrein-6 Antibody - Protocols

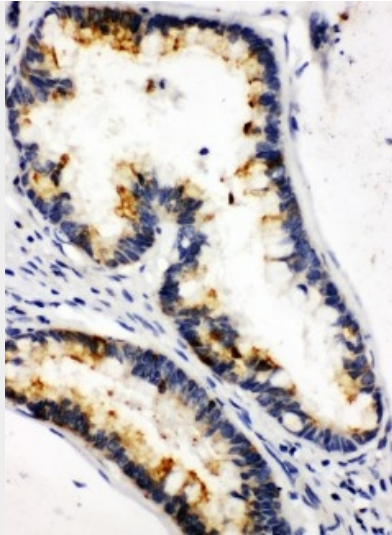
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

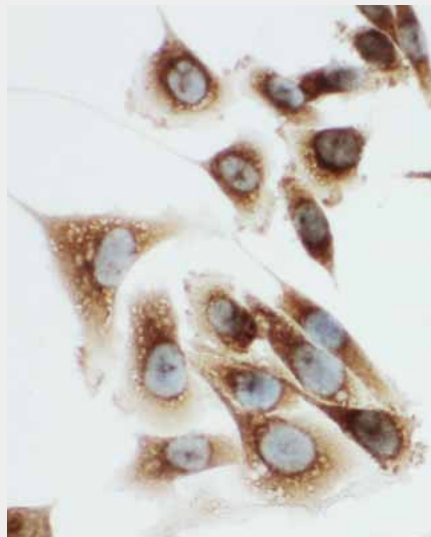
## Anti-Kallikrein-6 Antibody - Images



Anti-Kallikrein 6 antibody, ABO11076, Western blotting  
All lanes: Anti Kallikrein 6 (ABO11076) at 0.5ug/ml  
Lane 1: MCF-7 Whole Cell Lysate at 40ug  
Lane 2: HELA Whole Cell Lysate at 40ug  
Lane 3: MM231 Whole Cell Lysate at 40ug  
Lane 4: MM453 Whole Cell Lysate at 40ug  
Lane 5: A549 Whole Cell Lysate at 40ug  
Lane 6: SMMC Whole Cell Lysate at 40ug  
Lane 7: COLO320 Whole Cell Lysate at 40ug  
Lane 8: SW620 Whole Cell Lysate at 40ug  
Lane 9: HT1080 Whole Cell Lysate at 40ug  
Predicted bind size: 27KD  
Observed bind size: 27KD



Anti-Kallikrein 6 antibody, ABO11076, IHC(P)IHC(P): Human Intestinal Cancer Tissue



Anti-Kallikrein 6 antibody, ABO11076, ICCICC: PC-3 Cell

#### **Anti-Kallikrein-6 Antibody - Background**

KLK6(Kallikrein-related peptidase 6), also called KALLIKREIN 6, NEUROSIN, PROTEASE M, ZYME or PRSS9, is a protein that in humans is encoded by the KLK6 gene. This gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. The encoded enzyme is regulated by steroid hormones. Northern blot analysis revealed that the PRSS9 mRNA was expressed in several primary tumors and cell lines from mammary, prostate, and ovarian cancers, but was not detected in any metastases of these cancers. The KLK6 gene is mapped on 19q13.41. 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. Upon cellular stress, neurosin was released from mitochondria to the cytosol, which resulted in the increase of degraded alpha-synuclein species. Neurosin may play a significant role in physiologic alpha-synuclein degradation and also in the pathogenesis of synucleinopathies.