

Anti-Kallikrein 6 Picoband Antibody

Catalog # ABO12965

Product Information

Application	WB, E
Primary Accession	Q92876
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Kallikrein 6 detection. Tested with WB, Direct ELISA in Human.

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

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
Application Details	Western blot, 0.1-0.5 μ g/ml Direct ELISA, 0.1-0.5 μ g/ml
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.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .

Immunogen	E. coli-derived human Kallikrein 6 recombinant protein (Position: L22-K244).
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.

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
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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.

Images

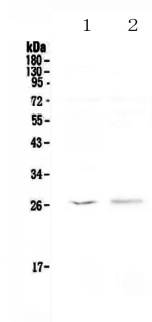


Figure 1. Western blot analysis of Kallikrein 6 using anti-Kallikrein 6 antibody (ABO12965).

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