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# KLK14 Rabbit pAb

Catalog # AP99862

## Product Information

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| **Application** | WB, IHC-P, IHC-F, IF |
| **Primary Accession** | Q9P0G3 |
| **Other Accession** | Q9P0G3 |
| **Reactivity** | Rat |
| **Predicted** | Human, Mouse, Dog, Horse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 27453 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human KLK14 |
| **Epitope Specificity** | 201-267/267 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the Bcl-2 family. |
| **SUBUNIT** | Interacts directly with BAK1, BID, BMF and BBC3 (By similarity). Interacts directly with BCL2L11/BIM. Interacts with BAX isoform Sigma. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | The human tissue Kallikrein gene family encodes 15 serine proteases. All Kallikreins share structural similarities including cysteine residues, a catalytic triad of His, Asp and Ser residues, typically five coding exons, and varied intron phases. Kallikreins are predominantly secreted as inactive zymogens prior to activation by cleavage of an N-terminal peptide and all function extracellularly. Kallikreins can be activated autocatalytically, via other Kallikreins, or additional proteases. While structurally similar, Kallikrein family members have distinct functions and have key roles in many physiological and pathological processes. Many human tissue Kallikreins also show promise as cancer biomarkers, which may facilitate earlier detection and characterization of many forms of cancer. Kallikrein 14, also known as kallikrein-like6 (KLK-L6), is a trypsin-like serine proteinase. Kallikrein 14 was discovered by cloning the kallikrein locus on chromosome 19 and was found to be similar to the other kallikrein family genes. Kallikrein 14 is produced by a number of tissues, including the brain, spinal cord, esophagus, salivary gland, breast, prostate, uterus, lung, thymus and thyroid. Like many of the kallikreins, Kallikrein 14 is also found in biological fluids like serum, breast milk, amniotic fluid, seminal plasma and cerebrospinal fluid. Kallikrein 14 message has been reported to be decreased in some breast cancers and in ovarian cancers, similar to Kallikrein 10. Some cell lines express Kallikrein 14 in culture and like many of the kallikreins, the production is stimulated by hormones. Recombinant kallikrein 14 was profiled on peptide substrates and found to possess both trypsin-like and chymotrypsin-like activity. The ECM proteins lamanin and collagen-IV are thought to be substrates of Kallikrein 14. Endogenous inhibitors include kallistatin, protein-C inhibitor and alpha1-proteinase inhibitor, although Kallikrein 14 can be found complexed to |

a number of different proteinase inhibitors.

## Additional Information

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| **Gene ID** | 43847 |
| **Other Names** | KLK-L6; GK14; Klnm; KLK14_HUMAN; KLK14; hK14; Kallikrein-like protein 6 (KLK-L6); 3.4.21.-; KLKL6; KLK14_MOUSE; Glandular kallikrein KLK14 (mGK14); Kallikrein related-peptidase 14; kallikrein related peptidase 14; kallikrein 14 |
| **Dilution** | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **Name** | KLK14 |
| **Synonyms** | KLKL6 |
| **Function** | Serine-type endopeptidase with a dual trypsin-like and chymotrypsin-like substrate specificity. May activate/inactivate the proteinase-activated receptors F2R, F2RL1 and F2RL3 and other kallikreins including KLK1, KLK3, KLK5 and KLK11. May function in seminal clot liquefaction through direct cleavage of the semenogelin SEMG1 and SEMG2 and activation of KLK3. May function through desmoglein DSG1 cleavage in epidermal desquamation a process by which the most superficial corneocytes are shed from the skin surface. May be involved in several aspects of tumor progression including growth, invasion and angiogenesis. |
| **Cellular Location** | Secreted, extracellular space |
| **Tissue Location** | Highly expressed in CNS, bone marrow and fetal liver. Also expressed in breast, thyroid, kidney, colon, pancreas, spleen, prostate, uterus, small intestine, placenta and skeletal muscle. Among 40 tissues tested, the highest expression is detected in skin followed by breast and prostate (at protein level). Expressed in stratum corneum by sweat ducts and sweat glands and detected in sweat (at protein level). |

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