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# KLK4 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57610

## Product Information

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| **Application** | E |
| **Primary Accession** | Q9Y5K2 |
| **Reactivity** | Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 27032 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human KLK4 |
| **Epitope Specificity** | 101-200/254 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SUBCELLULAR LOCATION** | Secreted. |
| **SIMILARITY** | Belongs to the peptidase S1 family. Kallikrein subfamily.Contains 1 peptidase S1 domain. |
| **DISEASE** | Defects in KLK4 are the cause of amelogenesis imperfecta hypomaturation type 2A1 (AI2A1) [MIM:204700]. AI2A1 is an autosomal recessive defect of enamel formation. The disorder involves both primary and secondary dentitions. The teeth have a shiny agar jelly appearance and the enamel is softer than normal. Brown pigment is present in middle layers of enamel. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | 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. This gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. In some tissues its expression is hormonally regulated. The expression pattern of a similar mouse protein in murine developing teeth supports a role for the protein in the degradation of enamel proteins. Alternate splice variants for this gene have been described, but their biological validity has not been determined. [provided by RefSeq]. |

## Additional Information

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| **Gene ID** | 9622 |
| **Other Names** | Kallikrein-4, 3.4.21.-, Enamel matrix serine proteinase 1, Kallikrein-like protein 1, KLK-L1, Prostase, Serine protease 17, KLK4, EMSP1, PRSS17, PSTS |
| **Target/Specificity** | Expressed in prostate. |

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| **Dilution** | ELISA=1:5000-10000 |
| **Format** | 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce |
| **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** | KLK4 |
| **Synonyms** | EMSP1, PRSS17, PSTS |
| **Function** | Has a major role in enamel formation (PubMed: 15235027). Required during the maturation stage of tooth development for clearance of enamel proteins and normal structural patterning of the crystalline matrix (By similarity). |
| **Cellular Location** | Secreted. |
| **Tissue Location** | Expressed in prostate. |