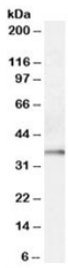
KLK5 Antibody / Stratum Corneum Tryptic Enzyme Antibody (R34346)

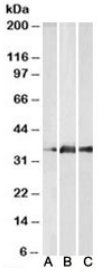
Catalog No.	Formulation	Size
R34346-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Cow, Dog, Rat
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	25818
Applications	Western Blot : 0.1-0.3ug/ml ELISA (peptide) LOD : 1:4000
Limitations	This KLK5 Antibody / Stratum Corneum Tryptic Enzyme Antibody is available for research use only.



KLK5 Antibody Prostate WB. Western blot analysis of human prostate tissue lysate using KLK5 Antibody detects a band at approximately 32 kDa, consistent with the predicted molecular weight of Kallikrein 5 / KLK5. This Stratum corneum tryptic enzyme antibody highlights epithelial-associated serine protease expression and supports characterization of epidermal barrier-related proteolytic signaling pathways and kallikrein family-associated tissue biology.



KLK5 Antibody Brain WB. Western blot analysis of A) human cerebellum, B) mouse brain, and C) rat brain lysates using KLK5 Antibody detects bands at approximately 32 kDa, consistent with the predicted molecular weight of Kallikrein 5 / KLK5. This Stratum corneum tryptic enzyme antibody highlights conserved expression of epithelial-associated serine protease signaling machinery across multiple mammalian tissues and supports characterization of kallikrein family-associated proteolytic regulation pathways.

Description

KLK5, commonly known as Kallikrein 5 or stratum corneum tryptic enzyme (SCTE), is a secreted serine protease involved in epidermal barrier maintenance, epithelial differentiation, desquamation, and protease-mediated signaling regulation within stratified epithelial tissues. KLK5 functions as an upstream activator of multiple kallikrein-associated proteolytic pathways involved in epithelial turnover and inflammatory signaling. KLK5 Antibody is useful for investigations involving epithelial biology, epidermal differentiation, serine protease signaling pathways, and skin barrier-associated cellular regulation.

KLK5 antibody, also referred to as Kallikrein 5 antibody, SCTE antibody, and Stratum corneum tryptic enzyme antibody in the literature, recognizes a secreted serine protease encoded on chromosome 19q13.41 within the kallikrein gene family cluster. KLK5 expression is enriched in epidermal keratinocytes and epithelial tissues where it contributes to corneodesmosome degradation, keratinocyte shedding, extracellular protease activation, and epithelial inflammatory signaling pathways. Dysregulated KLK5 expression has been associated with inflammatory skin disease, epithelial tumor biology, and aberrant protease-associated signaling networks.

KLK5 Antibody / Stratum Corneum Tryptic Enzyme Antibody is uniquely positioned for studies involving epithelial protease signaling and epidermal barrier-associated regulation. This goat polyclonal antibody supports western blot detection of KLK5-associated proteolytic signaling pathways in epithelial tissues and cellular systems. The polyclonal nature of the antibody may additionally support recognition of multiple KLK5-associated epitopes involved in extracellular protease regulation and epithelial differentiation-associated signaling.

KLK5 contributes directly to epidermal homeostasis through controlled proteolytic regulation of desquamation and epithelial turnover pathways. KLK5-associated protease signaling additionally influences inflammatory responses, extracellular matrix remodeling, epithelial barrier integrity, and tissue-associated proteolytic activity. Because KLK5 expression is strongly associated with epithelial protease regulation and barrier-associated biology, it serves as an important marker for investigations involving epithelial differentiation and cutaneous signaling pathways.

In tissue-based and protein detection systems, KLK5 expression commonly demonstrates epithelial-associated and extracellular localization patterns consistent with secreted serine protease biology. Keratinocyte-rich tissues may demonstrate strong KLK5-associated expression reflecting active epithelial turnover and protease-mediated signaling regulation. KLK5-associated signaling pathways are important for maintenance of epithelial barrier organization and controlled epidermal renewal.

This KLK5 Antibody supports research involving epidermal barrier regulation, epithelial differentiation, extracellular protease signaling, desquamation pathways, keratinocyte biology, inflammatory skin signaling, and epithelial-associated proteolytic regulation. The antibody may be incorporated into western blot and tissue-based investigations examining epithelial protease-associated signaling in normal and diseased tissues.

For highly specific detection of KLK5-associated epithelial barrier signaling pathways, see our Kallikrein 5 Antibody / Epidermal Barrier Protease Antibody page featuring clone KLK5/3841 with IHC and HuProt(TM) microarray specificity validation data.

Application Notes

Optimal dilution of the KLK5 Antibody / Stratum Corneum Tryptic Enzyme Antibody should be determined by the researcher.

Immunogen

Amino acids KAGRDSCQGD were used as the immunogen for this KLK5 antibody.

Storage

Aliquot and store the KLK5 antibody at -20oC.

Alternate Names

KLK5 antibody, Kallikrein 5 antibody, SCTE antibody, Stratum corneum tryptic enzyme antibody, Epidermal serine protease antibody