

Inhibitors

Screening Libraries

Proteins

Product Data Sheet

Kallikrein-7 Protein, Human (HEK293, His, solution)

Cat. No.: HY-P70163

Synonyms: rHuKallikrein 7/KLK7, His; Kallikrein-7; hK7; Serine Protease 6; Stratum Corneum Chymotryptic

Enzyme; hSCCE; KLK7; PRSS6; SCCE

Species: Human Source: **HEK293**

Accession: AAH32005 (E23-H252)

Gene ID: 5650

Molecular Weight: Approximately 30.0 kDa

PROPERTIES

ΛΛ	500	11105	
AA	sec	uer	ıce

EEAQGDKIID	GAPCARGSHP	WQVALLSGNQ	LHCGGVLVNE
RWVLTAAHCK	MNEYTVHLGS	DTLGDRRAQR	IKASKSFRHP
GYSTQTHVND	$L\;M\;L\;V\;K\;L\;N\;S\;Q\;A$	RLSSMVKKVR	LPSRCEPPGT
TCTVSGWGTT	TSPDVTFPSD	LMCVDVKLIS	PQDCTKVYKD
LLENSMLCAG	IPDSKKNACN	$G\;D\;S\;G\;G\;P\;L\;V\;C\;R$	GTLQGLVSWG
TFPCGQPNDP	GVYTQVCKFT	KWINDTMKKH	

Biological Activity

The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

Appearance

Solution.

Formulation

Supplied as a 0.2 μ m filtered solution of 20 mM HEPES, 150 mM NaCl, pH 7.5.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconsititution

N/A

Storage & Stability

Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

Shipping

Shipping with dry ice

DESCRIPTION

Background

The molecular mass of full-length mature KLK7 is predicted to be \(\Omega 25 \) kDa, and KLK7 has one predicted glycosylation site at 246NDT, which is located away from the KLK7 catalytic triad and substrate binding pocket^[1].

KLK7 is a member of the tissue kallikrein family that comprises 15 chymotrypsin- or trypsin-like serine proteases in humans. KLK7 is predominantly expressed in the skin where it is involved in the desquamation process. Aberrant KLK7 activity is a major underlying pathogenic mechanism of inflammatory skin diseases such as psoriasis, acne rosacea and Netherton

 $syndrome^{[1]}$.

KLK7 is initially characterized as an enzyme implicated in the degradation of intercellular cohesive structures in the stratum corneum of stratified squamous epithelia, preceding desquamation in the skin. It catalyzes the degradation of desmosomes in the outermost layer of skin and permits cell shedding to take place at the skin surface. Overexpression of KLK7 in tumor cells has been reported to significantly enhance the invasive potential in intracranial malignancies and ovarian cancer cells. Thus, KLK7 can contribute to the degradation of extracellular matrices in oral squamous cell carcinoma (OSCC) tissues, promoting invasion of neoplastic cells locally and facilitating metastasis to regional lymph nodes^[2].

Caution: Product has not been fully validated for medical applications. For research use only.

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