

Kallikrein (Human)

1.00 mg

Ref#: HKAL

Lot#: xxxxxx

Exp. Date: xxxx-xx



For Research Use Only

Not for Use in Diagnostic Procedures

For *in vitro* use only

Description:	Kallikrein (Human)
Format:	Lyophilized in 4 mM sodium acetate-HCl / 0.15 M NaCl / pH 5.4
Host:	Human
Storage:	Store between +2 and +8°C After reconstitution aliquot and freeze at ≤-60°C
Reconstitution:	We recommend hydrating the protein with sterile water to the original volume
Volume:	1 vial containing 0.909 mL
Total Protein:	1.00 mg
Concentration:	1.10 mg/mL before lyophilisation by Absorbance; Extinction Coefficient $E^{1\%}_{280} = 11.7$
Activity:	161.0 U/mg
Molecular weight:	86,000 daltons

Plasma Prekallikrein, also known as Fletcher factor, is a 86 kDa serine protease synthesized in the liver and composed of a single chain glycoprotein. In plasma, about 75% is complexed with HMW kininogen and the remaining 25% is free. Prekallikrein is the zymogen form of kallikrein.

Activation of Prekallikrein with Factor α -XIIa produces the enzymatically active Kallikrein. Kallikrein is a serine protease which consists of a heavy chain (52kD) and light chains (36 or 33 kD) linked by disulfide bridges. Kallikrein possesses enzymatic activity toward Factor XII, HK, Plasminogen, Factors XI, IX, and VII, prorenin and the complement system.

This Kallikrein was produced by the activation of Prekallikrein with Human Factor XIIa. After activation, the Factor XIIa is removed by affinity chromatography. The Human Kallikrein is >95% pure as judged by SDS-PAGE gels and shows complete reduction upon incubation with 2-mercaptoethanol.

The above protein was purified from Human plasma that was tested and found negative by FDA accepted methods for Anti-HIV 1/2, Anti-HTLV I & II, HBsAg, Anti-HCV, Syphilis, HBC Ab, HIV-1 p24 Ag or HIV-1 RNA, HCV RNA and HBV RNA. Donors are screened for CJD (Creutzfeld-Jakob Disease).