

# Human Kallikrein

## REF 473 Lot No. YYMMDD, Exp. YYYY-MM-DD

### Description

Kallikrein is an 85,000 D molecular weight, two chain serine protease resulting from the cleavage of prekallikrein (Fletcher Factor), its precursor zymogen, by factor XIIa. The protein consists of a 52,000 D molecular weight heavy chain and a 33,000 D molecular weight light chain covalently attached by a disulfide bonds.

Kallikrein releases kinin from kininogen, a peptide involved in vasoconstriction, regulation of blood pressure, and inflammation. Kallikrein can convert plasminogen into plasmin, as well as exhibit enzymatic activity to factors VII, IX and XI.

### Preparation

Human kallikrein has been prepared from human kallikrein, itself purified from fresh frozen human plasma, via factor XIIa activation. FXIIa is removed from the preparation by affinity chromatography. Purity is determined via SDS-PAGE analysis. The protein shows complete reduction of its disulfide bonds following incubation with 2-mercaptoethanol.

### Warning

The source material for this reagent has been found to be non-reactive for Hepatitis B Surface Antigen (HBsAg), Hepatitis C Virus (HCV) and Human Immunodeficiency Virus Type 1 and Type 2 (HIV-1, HIV-2) using FDA Approved methods. As no known test method can provide complete assurance that products derived from human blood will not transmit HBsAg, HCV, HIV-1, HIV-2 or other blood-borne pathogens, this reagent should be handled as recommended for any potentially infectious human specimen.

### Presentation

Screw-capped plastic cryotube containing 1.0 mg of human kallikrein in XXX µL of a 4 mM sodium acetate/hydrochloride, 150 mM sodium chloride, pH 5.3 solution. Protein content was determined by spectrophotometric analysis at a wavelength of 280 nm using an extinction coefficient of 1.17 for a 0.1% solution, 1 cm pathlength.

### Storage

Store at -70°C. Avoid freeze-thaw cycles.