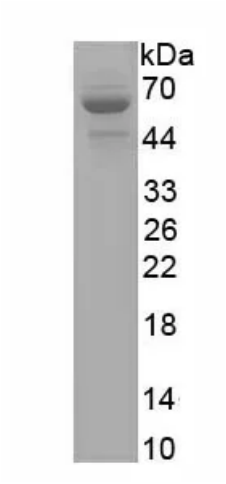
Active Kallistatin (KAL)

Catalog#:PEH12917

概述（Summary）

别称（Alternative Names）	SERPINA4; KLST; KST; PI4; Serpin Peptidase Inhibitor Clade A Member 4; Tissue Kallikrein Inhibitor; Kallikrein Binding Protein; Peptidase inhibitor 4
纯度（Purity）	Greater than 80% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gln21-Pro427】
Accession #	P29622
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	50.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Inhibits human amidolytic and kininogenase activities of tissue kallikrein. Inhibition is achieved by formation of an equimolar, heat- and SDS-stable complex between the inhibitor and the enzyme, and generation of a small C-terminal fragment of the inhibitor due to cleavage at the reactive site by tissue kallikrein.

电泳图（SDS-PAGE image）



Greater than 80% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

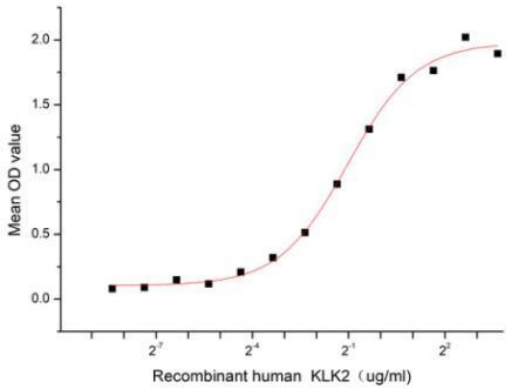


Figure 1. The binding activity of recombinant human KAL and recombinant human KLK2

Kallistatin (KAL), a member of serpin family, can Inhibit human amidolytic and kininogenase activities of tissue kallikrein. KAL is widely distributed in a variety of organs and body fluids and has biological effects such as anti-inflammatory, antioxidant stress, anti-angiogenesis and anti-tumor. Besides, Kallikrein 2 (KLK2) has been identified as an interactor of KAL, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human KAL and recombinant human KLK2. Briefly, KLK2 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to KAL-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-KLK2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL stop solution to the wells and read at 450/630 nm immediately. When recombinant human KAL is immobilized at 2 ug/mL (100 uL/well), the concentration of KLK2 that produces 50% optimal binding response is found to be approximately 0.49 ug/mL.

注意事项（Note）

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