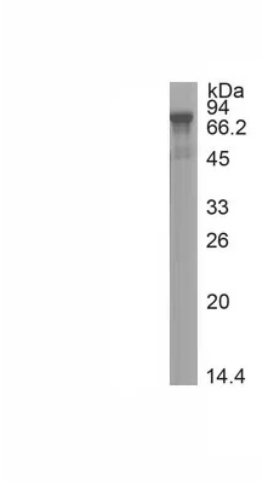
Active Serpin A10 (SERPINA10)

Catalog#:PEH12799

概述（Summary）

别称（Alternative Names）	PZI; ZPI; Serine(Cysteine)Proteinase Inhibitor,Clade A(Alpha-1 Antiproteinase,Antitrypsin)Member 10; Protein Z-Related Protease Inhibitor; Protein Z Dependent Protease Inhibitor
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）	【Pro24-Leu444】
Accession #	Q9UK55
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	78.3 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 activity of the coagulation protease factor Xa in the presence of PROZ, calcium and phospholipids. Also inhibits factor XIa in the absence of cofactors.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

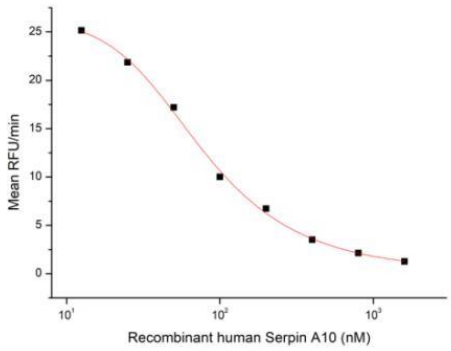


Figure 1. Inhibition of Coagulation Factor X activity by recombinant human SERPINA10

Protein Z-dependent Protease Inhibitor (ZPI), also known as SerpinA10 (SERine Proteinase INhibitor-clade A10) is a monomeric, secreted member of the A (or extracellular) clade within the serpin superfamily of protease inhibitors. In general, members of this superfamily regulate multiple proteolytic cascades, and are particularly effective due to the fact that their inhibitory activities can be fine-tuned through the participation of discrete, non-serpin co-factors. Serpins are unusual in that they are one-time use, non-recyclable proteins whose native state is thermodynamically unstable. The activity of recombinant human SERPINA10 was measured by its ability to inhibit Coagulation Factor X cleavage of a fluorogenic peptide substrate Mca-RPKPVE-Nval-WRK(Dnp)-NH2 in the assay buffer 50 mM Tris, 10 mM CaCl2, 150 mM NaCl, 0.05% (w/v) Brij-35, pH 7.5. Coagulation Factor X was diluted to 5 ug/ml in the assay buffer and 25 ul different concentrations of recombinant human SERPINA10 (MW: 78.26 KD) was incubated with 25 ul diluted Coagulation Factor X at 37 ℃ for 30 minutes. Loading 50 µL 20 µM substrate to start the reaction including a substrate blank containing 50 µL of assay buffer and 50 µL of 20 µM substrate. Then read at excitiation and emission wavelengths of 320 nm and 405 nm, respectively, in kinetic mode for 5 minutes. The result was shown in Figure 1 and it was obvious that recombinant human SERPINA10 significantly decreased Coagulation Factor X activity. The inhibition IC50 was <75 nM.

注意事项（Note）

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