# Active Tissue Factor Pathway Inhibitor 2 (TFPI2) Instruction Manual

## SBPB281Mu01

## Mus musculus (Mouse)

Buffer Formulation 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA,

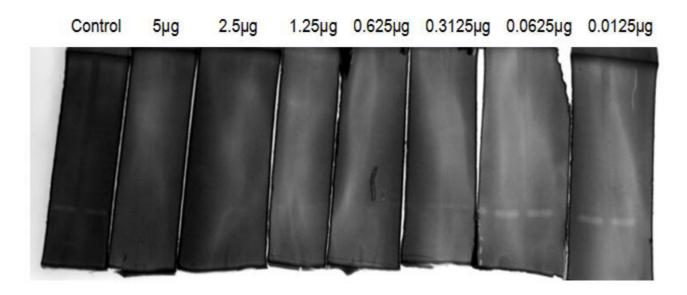
1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

**Traits** Freeze-dried powder

Purity > 95% Isoelectric Point 8.9

**Applications** Cell culture; Activity Assays.

## **ACTIVITY TEST**



Tissue Factor Pathway Inhibitor 2 (TFPI2) takes part in the regulation of plasmin-mediated matrix remodeling. Inhibits trypsin, plasmin, factor VIIa/tissue factor and weakly factor Xa. TFPI2 doesn't have any influence on thrombin. TFPI2 also can inhibit MMP activity, which can hydrolyze gelatin under certain conditions. Thus, the activity of TFPI2 can be measured by inhibit MMP-2 hydrolyze gelatin. Gelatin zymography is mainly used for the detection of the gelatinases, 2μg/mL was denatured by SDS loading buffer, electrophoresed through sodium dodecylsulphate–polyacrylamide gel (SDS–

PAGE; 8% gels) containing gelatin (1mg/mL) with nonreducing conditions. After renaturation, incubate with various concentrations of recombinant mouse TFPI2, then staining with coomassie brilliant blue G250, active MMP-2 would hydrolyze gelatin nearby, which was indicated by the white binds on the gel; if the activity of MMP-2 inhibit by TFPI2, there was none white binds on the gel. The result was shown in figure 1. As the figure 1 shown, MMP-2 can be inhibited by recombinant mouse TFPI2 at least 2.5μg/mL.

#### **USAGE**

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

#### STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

### **STABILITY**

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

**Image** 

# Figure. Gene Sequencing (Extract)



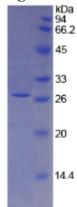


Figure. SDS-PAGE

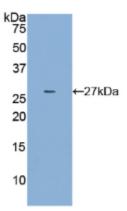


Figure. Western Blot

# [IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.