# **Active Coagulation Factor II (F2) Instruction Manual**

## **SBPA188Ra02**

### Rattus norvegicus (Rat)

**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 4.9

**Applications** Cell culture; Activity Assays.

#### **ACTIVITY TEST**

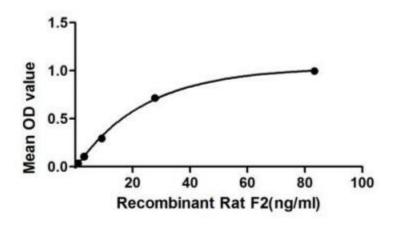


Figure 1. The binding activity of F2 with PCI.

Coagulation Factor II (F2) also commonly called pro-thrombin is a coagulation protein in the blood stream that has many effects in the coagulation cascade. It is a serine protease that converts fibrinogen to fibrin and activates factors V, VII, VIII, XIII, and, in complex with thrombomodulin, protein C. Besides, Protein C Inhibitor (PCI) has been identified as an interactor of F2, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat F2 and recombinant rat PCI. Briefly, F2 were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to PCI-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-F2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally,

add  $50\mu$ L stop solution to the wells and read at 450nm immediately. The binding activity of of F2 and PCI was shown in Figure 1, and this effect was in a dose dependent manner.

#### USAGE

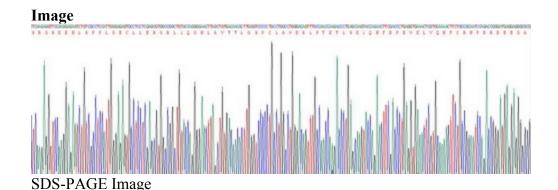
Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

#### **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.



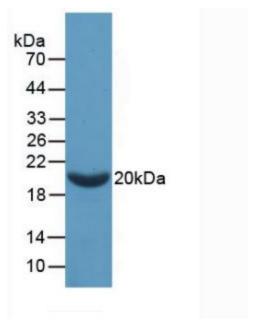


Figure. Western Blot; Sample: Recombinant F2, Human.

## [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.