APA524Ra01 100μg
Active Tissue Factor (TF)
Organism Species: Rattus norvegicus (Rat)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Gly30~Glu252
Tags: N-terminal His-tag
Purity: >95%
Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 9.2
Predicted Molecular Mass: 26.9kDa
Accurate Molecular Mass: 29kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

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

[STORAGE AND STABILITY]

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

Stability Test: 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 37ºC 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.

[SEQUENCE]

G TPPGKAFNLT WISTDFKTIL
EWQPKPTNYT YTVQISDRSR NWKYKCTGTT DTECDLTDEI VKDVNWTYEA
RVLSVPWRNS THGKETLFGT HGEEPPFTNA RKFLPYRDTK IGQPVIQKYE
QGGTKLKVTV KDSFTLVRKN GTFLTLRQVF GNDLGYILTY RKDSSTGRKT
NTTHTNEFLI DVEKGVSYCF FAQAVIFSRK TNHKSPESIT KCTEQWKSVL
GE

[ACTIVITY]

TF (Tissue factor) also known for platelet tissue factor, factor III, thromboplastin, or CD142, is a cell surface glyprotein present in subendothelial tissue and leukocytes. TF is necessary for the initiation of thrombin formation from the zymogen prothrombin. It has been proven that EGF can bind with the TF on the hemangioendotheliocytes. Thus a binding ELISA assay was conducted to detect the interaction of recombinant rat TF and recombinant rat EGF. Briefly, TF were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL TF were then transferred to EGF-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-TF 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℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of TF and EGF was shown in Figure 1, and this effect was in a dose dependent manner.

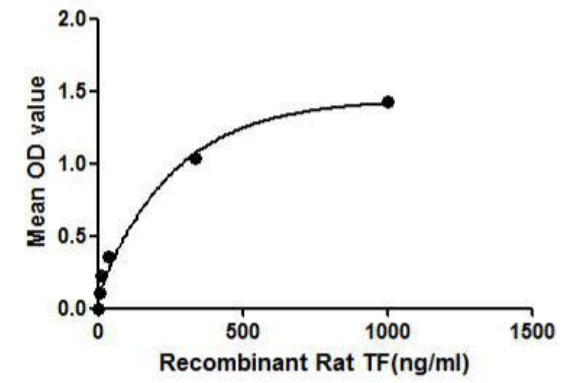

Figure 1. The binding activity of TF with EGF.

[IDENTIFICATION]

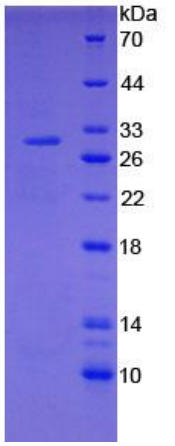

Figure 2. SDS-PAGE

Sample: Active recombinant Tissue Factor, Rat

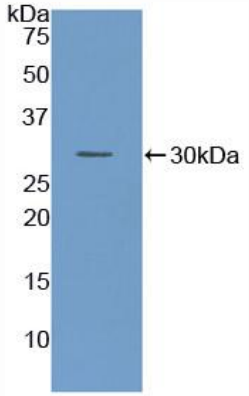

Figure 3. Western Blot

Sample: Recombinant Tissue Factor, Rat;

Antibody: Rabbit Anti-Rat Tissue Factor Ab (PAA524Ra01)