

**RPA677Ra07 50µg**  
**Recombinant Coagulation Factor XII (F12)**  
**Organism Species: *Rattus norvegicus* (Rat)**  
***Instruction manual***

FOR RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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12th Edition (Revised in Aug, 2016)

**[ PROPERTIES ]**

**Source:** Prokaryotic expression

**Host:** *E.coli*

**Residues:** Ala20~Arg353

**Tags:** Two N-terminal Tags, His-tag and SUMO-tag

**Subcellular Location:** Secreted

**Purity:** > 90%

**Traits:** Freeze-dried powder

**Buffer formulation:** PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

**Original Concentration:** 200µg/mL

**Applications:** Positive Control; Immunogen; SDS-PAGE; WB.

(May be suitable for use in other assays to be determined by the end user.)

**Predicted isoelectric point:** 8.4

**Predicted Molecular Mass:** 51.5kDa

**Accurate Molecular Mass:** 55kDa as determined by SDS-PAGE reducing conditions.

**Phenomenon explanation:**

The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

**[ USAGE ]**

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

**[ STORAGE AND STABILITY ]**

**Storage:** Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

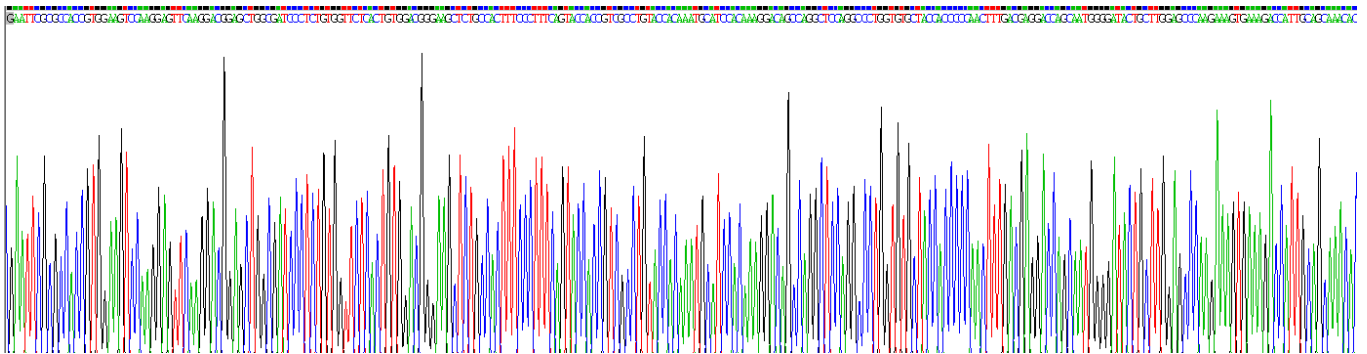
**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration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

**[ SEQUENCE ]**

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                A PPWKSKEFKD GAGDPSVVLV VDGKLCHFPF
QYHRRLYHKC  IHKGQPGSRP WCATTPNFDE DQQWGYCLEP KKVKDHCSKH
SPCHKGGTVCV NTPNGPHCLC PEHLTGKHCQ REKCFESQLL KFFHENEIWF
RTGPGGVARC  QCKGPQAVCK LLTSQVCRVN PCLNGGTCLL VEDHRLCHCP
AGYAGPFCDL  DLKATCYEDR GLSYRGQAKT TLSGAPCQRW ASEATYRNMT
ETQALSWGLG  HHAFCRNPDN DTRPWCYVWS GDRLSWDYCD LEQCQMPTLT
SPVSPESHDM  LKPRPPILQM PQFPSLSDAL DNSTRNQNVV SRTSTVVCQG
RFR
    
```

**[ IDENTIFICATION ]**



**Figure . Gene Sequencing (extract)**

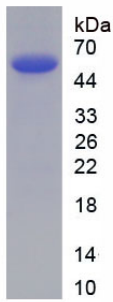


Figure. SDS-PAGE

**[ 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.