

**APA388Mu61 100µg**  
**Active Complement Component 5a (C5a)**  
**Organism Species: *Mus musculus (Mouse)***  
***Instruction manual***

FOR RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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13th Edition (Revised in Aug, 2023)

## **[ PROPERTIES ]**

**Source:** Eukaryotic expression.

**Host:** 293F cell

**Residues:** Asn679~Arg755

**Tags:** N-terminal His-tag

**Purity:** >95%

**Endotoxin Level:** <1.0EU per 1µg (determined by the LAL method).

**Buffer Formulation:** PBS, pH7.4, containing 5% Trehalose .

**Original Concentration:** 200µg/mL

**Applications:** Cell culture; Activity Assays.

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

**Predicted isoelectric point:** 9.3

**Predicted Molecular Mass:** 10.5kDa

**Accurate Molecular Mass:** 14kDa as determined by SDS-PAGE reducing conditions.

## **[ 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.

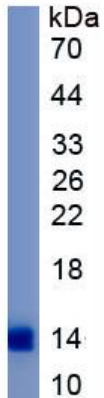
## **[ SEQUENCE ]**

NL HLLRQKIEEQ AAKYKHSVPK  
KCCYDGARVN FYETCEERVA RVTIGPLCIR AFNECCTIAN KIRKESPHKP  
VQLGR

## **[ ACTIVITY ]**

Complement Component 5a (C5a) is a component of the complement system which plays a key role in promoting migration and adherence of neutrophils and monocytes to vessel walls. The activity of recombinant mouse C5a was also measured by its ability to induce N-acetyl-  $\beta$  -D-glucosaminidase release from differentiated U937 human histiocytic lymphoma cells.  $3.2 \times 10^6$  differentiated U937 cells were added to the 24-well plate and different concentrations of rmC5a was added to the 24-well plate and incubated at 37 °C for 3min. The cells were centrifuged at 400 g for 3min, and the supernatant contained N-acetyl-  $\beta$  -D-glucosaminidase. The enzyme activity of N-acetyl-  $\beta$  -D-glucosaminidase was measured by the substrate of 4-Nitrophenyl 2-acetamido-2-deoxy-  $\beta$  -D-glucopyranoside. The result was shown in figure 1, It was obvious that rmC5a can significantly induce N-acetyl-  $\beta$  -D-glucosaminidase release.





**Figure 3. SDS-PAGE**

**Sample: Active recombinant C5a, Mouse**

**[ 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.