

**APB944Mu01 100µg**

**Active Annexin A2 (ANXA2)**

**Organism Species: *Mus musculus* (Mouse)**

***Instruction manual***

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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1th Edition (Apr, 2016)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Val46~Glu181

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

**Purity:** >98%

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

**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:** 9.0

**Predicted Molecular Mass:** 19.0kDa

**Accurate Molecular Mass:** 19kDa 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 2-8°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 ]**

VKTKG  
VDEVTIVNIL TNRSNVQRQD IAFAYQRRTK KELPSALKSA LSGHLETVIL  
GLLKTPAQYD ASELKASMKG LGTDEDSLIE IICSRTNQEL QEINRVYKEM  
YKTDLEKDII SDTSGDFRKL MVALAKGRRRA E

## **[ ACTIVITY ]**

Annexin A2 (ANXA2) also known as annexin II is a member of the annexin family. Members of this calcium-dependent phospholipid-binding protein family play a role in the regulation of cellular growth and in signal transduction pathways. This protein functions as an autocrine factor which heightens osteoclast formation and bone resorption. It is a calcium-dependent phospholipid-binding protein whose function is to help organize exocytosis of intracellular proteins to the extracellular domain. Besides, S100 Calcium Binding Protein A10 (S100A10) has been identified as an interactor of ANXA2, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse ANXA2 and recombinant mouse S100A10. Briefly, ANXA2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to S100A10-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ANXA2 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 50µL stop solution to the wells and read at 450nm immediately. The binding activity of ANXA2 and S100A10 was shown in Figure 1, and this effect was in a dose dependent manner.

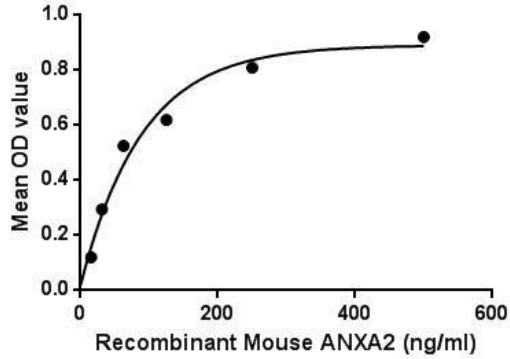


Figure 1. The binding activity of ANXA2 with S100A10.

## [ IDENTIFICATION ]

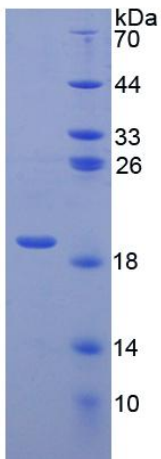
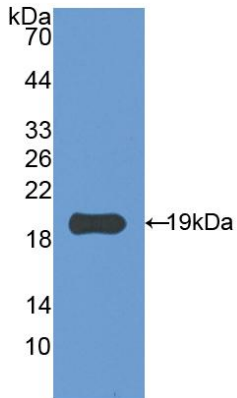


Figure 2. SDS-PAGE

Sample: Active recombinant ANXA2, Mouse



**Figure 3. Western Blot**

**Sample: Recombinant ANXA2, Mouse;**

**Antibody: Rabbit Anti-Mouse ANXA2 Ab (PAB944Mu01)**

### **[ IMPORTANT NOTE ]**

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