

**APE787Hu01 100µg**  
**Active Annexin A1 (ANXA1)**  
**Organism Species: *Homo sapiens (Human)***  
***Instruction manual***

FOR RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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1st Edition (Apr, 2016)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Met1~Asn346

**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:** 6.1

**Predicted Molecular Mass:** 45.4kDa

**Accurate Molecular Mass:** 44kDa 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.

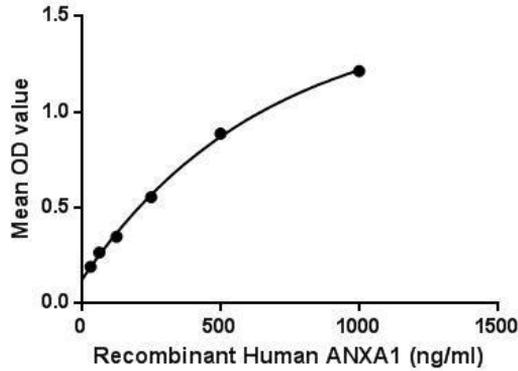
## **[ SEQUENCE ]**

```
MAMVSEFLKQ AWFIEENEEQE YVQTVKSSKG GPGSAVSPYP TFNPSSDVAA  
LHKAIMVKGV DEATIIDILT KRNNARQQI KAAYLQETGK PLDETLKKAL  
TGHLEEVVLA LLKTPAQFDA DELRAAMKGL GTDEDTLIEI LASRTNKEIR  
DINRVYREEL KRDLAKDITS DTSGDFRNAL LSLAKGDRSE DFGVNEDLAD  
SDARALYEAG ERRKGTDVNV FNTILTTRSY PQLRRVFQKY TKYSKHDMMNK  
VLDLELKGDI EKCLTAIVKC ATSKPAFFAE KLHQAMKGVG TRHKALIRIM  
VSRSEIDMND IKAFYQKMYG ISLCQAILDE TKG DY EKILV ALCGGN
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## **[ ACTIVITY ]**

Annexin A1 (ANXA1), also known as lipocortin I, belongs to the annexin family of Ca<sup>2+</sup>-dependent phospholipid-binding proteins that have a molecular weight of approximately 35,000 to 40,000 and are preferentially located on the cytosolic face of the plasma membrane. Annexin A1 protein has an apparent relative molecular mass of 40kDa with phospholipase A2 inhibitory activity. Besides, S100 Calcium Binding Protein A11 (S100A11) has been identified as an interactor of ANXA1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human ANXA1 and recombinant human S100A11. Briefly, ANXA1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µL were then transferred to S100A11-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ANXA1 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 ANXA1

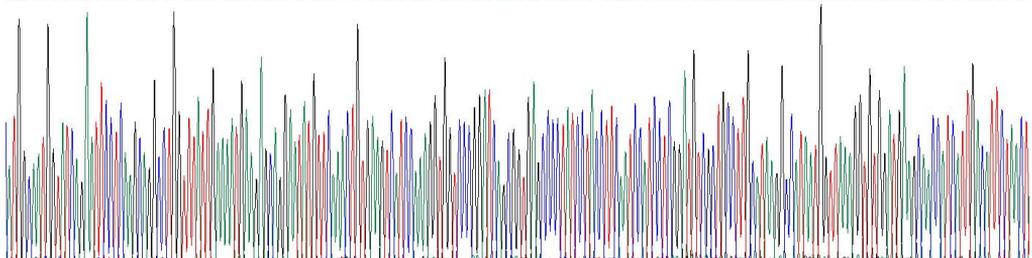
and S100A11 was shown in Figure 1, and this effect was in a dose dependent manner.



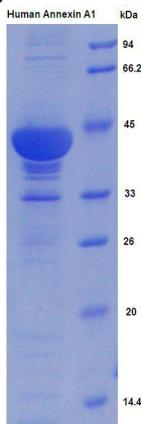
**Figure 1. The binding activity of ANXA1 with S100A11.**

**[ IDENTIFICATION ]**

ATGGCAATGATGAGAACTCTGAGCGGCCTGGTTTATTGAAATGAAGACAGGAAATGTTGAACATGTTGAGTCACTCCAAAGGTGGTCCCGATCAAGCGGTGAGCCCTATCTACCTTCAATCCATCTCGGATGTCCTGGATAGGCATATAAGGTAAAGGTGGATGAAGAACCATCATTGAGATCTAACT  
M A M Y S E F L K Q A W F I E H E B Q E Y V Q T V E S S K G G P G S A V S P Y P T F H P S S D V A A L H K A I N V E G Y D E A T I I D I L T I

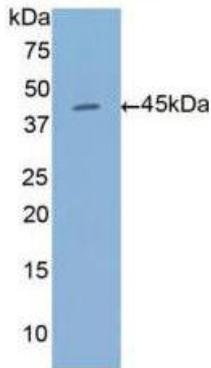


**Figure 2. Gene Sequencing (extract)**



**Figure 3. SDS-PAGE**

**Sample: Active recombinant ANXA1, Human**



**Figure 4. Western Blot**

**Sample: Recombinant ANXA1, Human;**

**Antibody: Rabbit Anti-Human ANXA1 Ab (PAE787Hu01)**

### **[ 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.