

**APA115Hu01 50µg**

**Active Prokineticin 2 (PK2)**

**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:** Ile30~Gln128

**Tags:** Two N-terminal Tags, His-tag and GST-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:** 10.2

**Predicted Molecular Mass:** 41.2kDa

**Accurate Molecular Mass:** 41kDa 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.

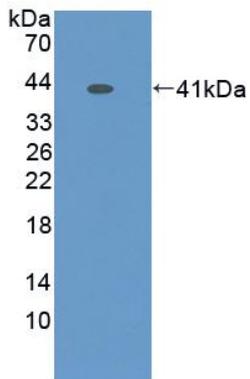
### [ SEQUENCE ]

```
                I TGACDKDSQC GGMCCA VSI  
WVKSIRICTP MGKLGDSCHP LTRKNNFGNG RQERRKRKRS KRKKEVPFFG  
RRMHHTCPCL PGLACLRTSF NRFICLAQ
```

### [ ACTIVITY ]

Prokineticin 2 (PK2) is a secreted protein belonging to the prokineticins family. It thought to be involved in several important physiological processes like neurogenesis, tissue development, angiogenesis, and nociception. Other important physiological roles the Bv8/Prokineticins (PKs) are involved in may include cancer, reproduction, and regulating physiological functions that influence circadian rhythms like hormone secretion, ingestive behaviors, and the sleep/wake cycle. Besides, Prokineticin receptor 1(PKR1) has been identified as an interactor of PK2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PK2 and recombinant human PKR1. Briefly, PK2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to PKR1-coated microtiter wells and incubated for 2h at 37 °C . Wells were washed with PBST and incubated for 1h with anti-PK2 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 PK2 and PKR1 was shown in Figure 1, and this effect was in a dose dependent manner.





**Figure 4. Western Blot**

**Sample: Recombinant PK2, Human;**

**Antibody: Rabbit Anti-Human PK2 Ab (PAA115Hu01)**

### **[ 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.