

**APB182Mu01 100µg**  
**Active Taxilin Alpha (TXLNa)**  
**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:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Met1~Ala234

**Tags:** N-terminal His and GST Tag

**Purity:** >95%

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

**Buffer Formulation:** PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

**Original Concentration:** 200µg/mL

**Applications:** Activity Assays.

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

**Predicted isoelectric point:** 6.3

**Predicted Molecular Mass:** 55.3kDa

**Accurate Molecular Mass:** 65kDa 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.

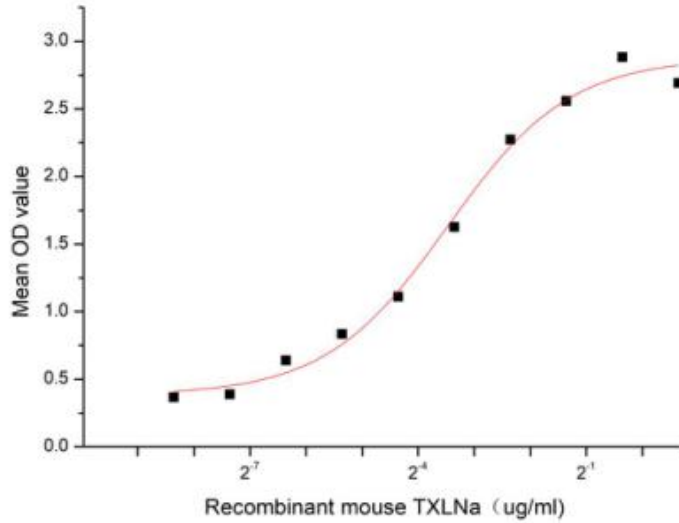
**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration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

## **[ SEQUENCE ]**

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MKNQDKKNGP AKHSNSKGGSP GQREAGPEGA HGRPRQTAPG AEAEGSTSQA PGKTEGARAK  
AAQPGALCDV SEELSRQLED ILSTYCVDDN QGGPAEEGAQ GEPTPEDETE KSRTYAARNG  
EPEPGIPVVN GEKETSKEGEP GTEEIRASDE VGDRDHRRPQ EKKKAKGLGK EITLLMQTLN  
TLSTPEEKLA ALCKKYAELL EEHRNSQKQM KLLQKKQSQL VQEKDHLRGE HSKA
```

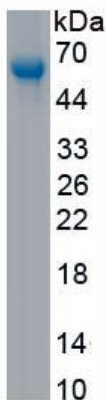
## **[ ACTIVITY ]**

Taxilin Alpha (TXLNa) also known as interleukin-14 (IL-14) is a cytokine that controls the growth and proliferation of both normal and cancerous B cells. TXLNa induces B-cell proliferation, inhibits antibody secretion, and expands selected B-cell subgroups. This interleukin is produced mainly by T cells and certain malignant B cells. Besides, Phosphodiesterase 4D Interacting Protein (PDE4DIP) has been identified as an interactor of TXLNa, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse TXLNa and recombinant human PDE4DIP. Briefly, TXLNa were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100ul were then transferred to PDE4DIP-coated microtiter wells and incubated for 2h at 37 °C. Wells were washed with PBST and incubated for 1h with anti-TXLNa 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 TXLNa and PDE4DIP was shown in Figure 1, the EC50 for this effect is 0.09ug/mL.



**Figure 1. The binding activity of recombinant mouse TXLNa and recombinant human PDE4DIP**

**[ IDENTIFICATION ]**



**Figure 2. SDS-PAGE**

**Sample: Active recombinant TXLNa, 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.