

**APB337Mu01 100µg**

**Active Elastin (ELN)**

**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:** Pro266~Gly443

**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:** 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:** 45.3kDa

**Accurate Molecular Mass:** 46kDa 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.

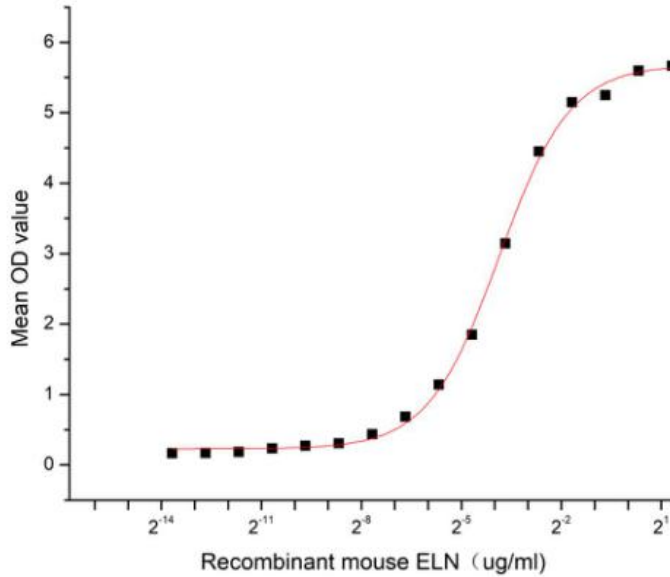
## **[ SEQUENCE ]**

```
PLGYP IKAPKLPGGY GLPYTNGKLP YGVAGAGGKA
GYPTGTGVGS QAAAAAAKAA KYGAGGAGVL PGVGGGGIPG GAGAIPGIGG
IAGAGTPAAA AAKAAAKAA KYGAAGGLVP GGPGVRLPGA GIPGVGGIPG
VGGIPGVGGP GIGGPGIVGG PAVSPAAAA KAAAKAAKYG ARG
```

## **[ ACTIVITY ]**

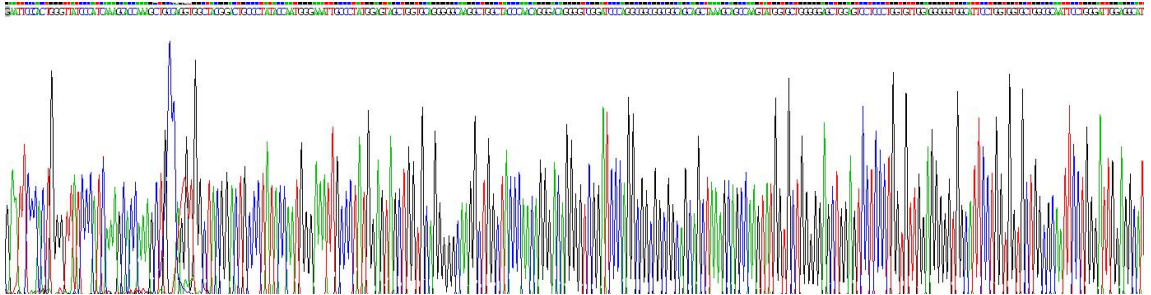
Elastin (ELN) is an extracellular matrix (ECM) protein responsible for the extensibility and elastic recoil of many vertebrate tissues. ELN is abundant in elastic tissues, and tissues rich in elastin include the aorta and major blood vessels, the lungs, elastic ligaments, tendons and the skin. ELN can bind the elastin receptor complex and other receptors and stimulate migration and proliferation of monocytes and skin fibroblasts. Elastokines can also contribute to cancer progression. Deletions and mutations in this gene are associated with supravalvular aortic stenosis (SVAS), autosomal dominant cutis laxa. Decorin (DCN), an extracellular matrix (ECM) protein, is one of targets of ECM. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse ELN and recombinant human DCN. Briefly, ELN was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to DCN-coated microtiter wells and incubated for 1h at 37 °C . Wells were washed with PBST and incubated for 1h with anti-ELN pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 °C , wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 °C . Finally, add 50  $\mu$ L stop solution to the wells and read at 450/630 nm immediately. The binding activity of

recombinant mouse ELN and recombinant human DCN was shown in Figure 1, the EC50 for this effect is 0.068 ug/mL.

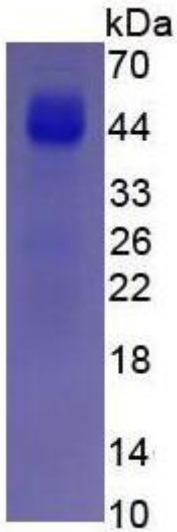


**Figure 1. The binding activity of recombinant mouse ELN and recombinant human DCN**

**[ IDENTIFICATION ]**



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



**Figure 3. SDS-PAGE**

**Sample: Active recombinant ELN, 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.