

APR176Mu01 100µg
Active Angiopoietin Like Protein 7 (ANGPTL7)
Organism Species: *Mus musculus (Mouse)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Gln22~Pro337

Tags: N-terminal His-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: 8.0

Predicted Molecular Mass: 37.8kDa

Accurate Molecular Mass: 37kDa 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]

QKPHKRKTQLKAAGCCEEMRELKAQVANLSSLLGELSRKQESDWVSVVM
QVMELESSSKHMESRLSTAESKYSEMNNQIDIMQLQAAQTVTQTSADAIYD
CSSLYQKNYRISGVYKLPDEFLLGSPELEVFCDMETSGGGWTTIQRRKSGLV
SFYQDWRQYKQGFSGIRGDFWLGNHHRHLTRQPSRLRVELEDWEGNARY
AEYSYFALGNELNSYRLFLLGNYSYGNVVKDALLYHNNTVVFSTKDKDNDNCLD
KCAQLRKGYYWYNCCTDSNLNGVYYRLGEHRKHMDGISWYGWHGANYSL
KRVEMKIRPEAFKP

[ACTIVITY]

ANGPTL7, short for Angiopoietin-like protein 7, is a member of the angiopoietin-like protein family, which is known for its diverse roles in angiogenesis, lipid metabolism, and other biological processes. ANGPTL7 is primarily expressed in the eye, particularly in the cornea and retina, and has been implicated in ocular development and maintenance of corneal transparency. It is believed to play a role in the regulation of cell growth and survival, and may be involved in the pathogenesis of certain eye diseases. It also play a role in the development of certain diseases, such as cancer, and has been studied for its potential as a biomarker or therapeutic target. The interaction between ANGPTL8 and ANGPTL7 may play an important role in biological activities such as cell signal transduction, cell adhesion or intracellular material transport. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse ANGPTL7 and recombinant mouse ANGPTL8. Briefly, ANGPTL7 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to ANGPTL8-coated microtiter wells and incubated for 1h at 37 °C . Wells were washed with PBST and incubated for 1h with anti-ANGPTL7 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 µL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant mouse ANGPTL7 and recombinant mouse ANGPTL8 was shown in Figure 1, the EC50 for this effect is 0.38 ug/mL.

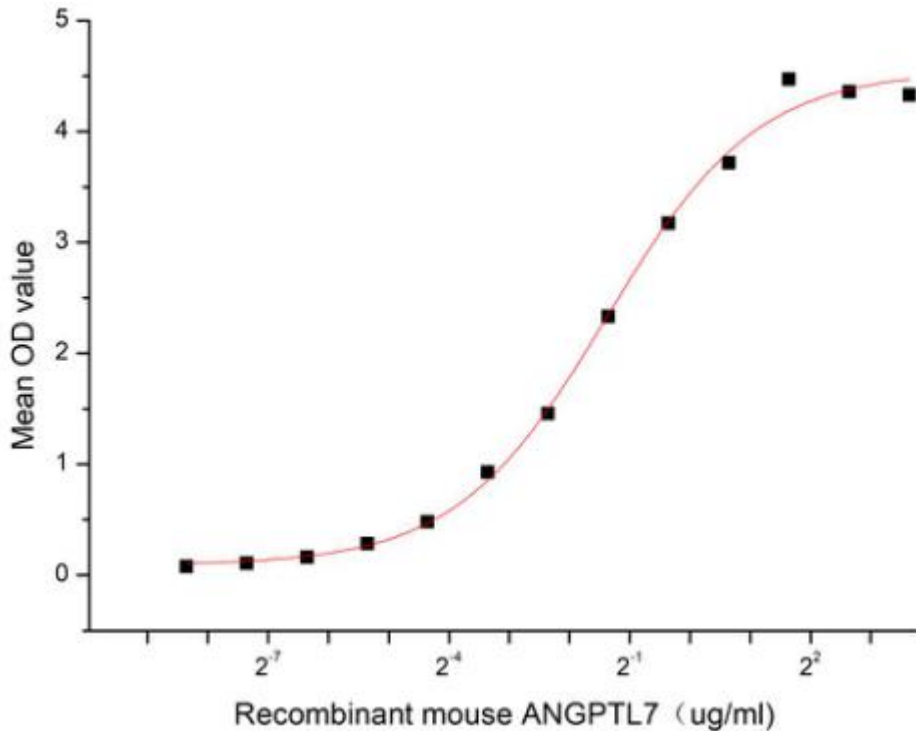


Figure 1. The binding activity of recombinant mouse ANGPTL7 and recombinant mouse ANGPTL8

[IDENTIFICATION]

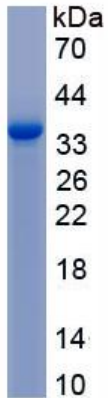


Figure 2. SDS-PAGE

Sample: Active recombinant ANGPTL7, 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.