

APF541Ra01 100µg
Active Leukocyte Cell Derived Chemotaxin 2 (LECT2)
Organism Species: *Rattus norvegicus* (Rat)
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: Met1~Leu151

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% Sarcosyl, 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: 9.5

Predicted Molecular Mass: 20.4kDa

Accurate Molecular Mass: 21kDa 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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MFPTRILMSA ALISTALAGP WANICASRSS NEIRTCDSYG CGQYSTQRTQ  
RHHPGVDVLC SDGSVVYAPF TGKIVGQEKP YRNKNAINDG VRLSGRGFCV  
KIFYIKPIKY KGSIRKGEKL GTLLPLQKVY PGIQSHVHIE NCDSSDPTAY  
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[ACTIVITY]

Leukocyte Cell-Derived Chemotaxin 2 (LECT2) is a multifunctional protein primarily secreted by hepatocytes, with additional expression in immune cells and endothelial cells. First identified as a chemotactic factor that recruits neutrophils, it is now recognized to exert broader roles across diverse physiological and pathological processes including liver regeneration, angiogenesis, osteoblastogenesis, and metabolic regulation. Functioning as a cytokine-like signaling molecule, LECT2 can bind to specific receptors (e.g., CD209a) to modulate immune responses. Besides, Alpha-1-Antitrypsin (a1AT) has been identified as an interactor of LECT2, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant rat LECT2 and recombinant human a1AT. Briefly, a1AT was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to LECT2-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-a1AT 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 μ L stop solution to the wells and read at 450/630nm immediately. Measured by its binding ability in a functional ELISA. When Recombinant LECT2 is Immobilized at 2 μ g/mL(100 μ Lwell), the

concentration of a1AT that produces 50% optimal binding response is found to be approximately 0.073 µg/mL.

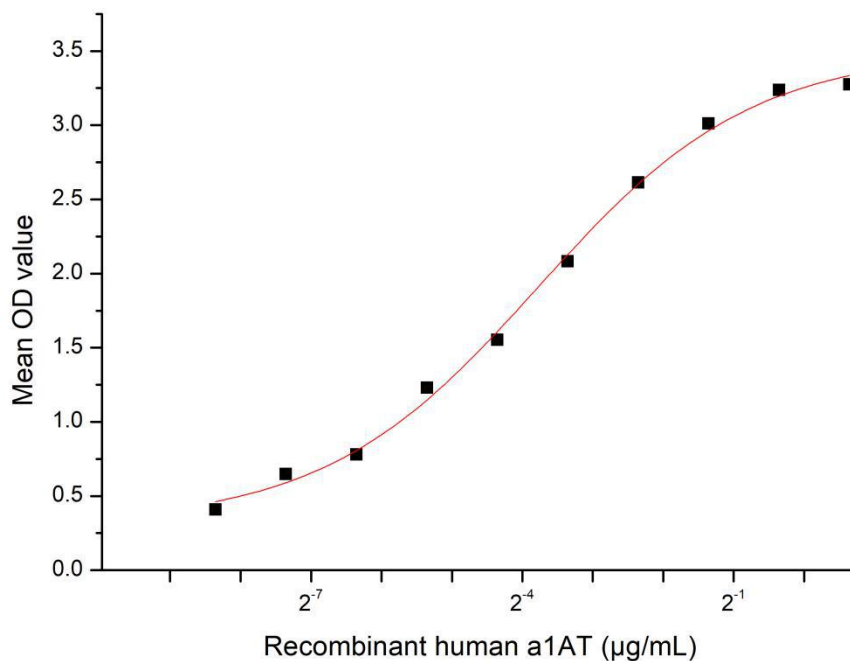


Figure 1. The binding activity of recombinant rat LECT2 and recombinant human a1AT

[IDENTIFICATION]

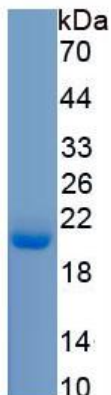


Figure 2. SDS-PAGE

Sample: Active recombinant LECT2, Rat

[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.