

APB694Ra61 100µg

Active Interleukin 25 (IL25)

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: Eukaryotic expression.

Host: 293F cell

Residues: Pro33~Ala169

Tags: N-terminal His-tag

Purity: >90%

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

Buffer Formulation: PBS, pH7.4, containing 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: 8.4

Predicted Molecular Mass: 17.4kDa

Accurate Molecular Mass: 20kDa 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]

PSKQQEFPEEWLKWNPAVPSPPEPLRHTTHHPESCRASKDGPLNSRAISPWSYELDRDLNRV
PQDLYHARCLCPHCVSLQTGSHMDPMGNSVPLYHNQTVFYRRPCHGEQGAHGRYCLERR
LYRVSLACVCVRPRMMA

[ACTIVITY]

Interleukin-25 (IL-25) is a cytokine belonging to the IL-17 family, also known as IL-17E. It is primarily secreted by Th2 cells and mast cells, playing a key role in promoting type 2 immune responses. IL-25 induces the production of cytokines such as IL-4, IL-5, and IL-13, stimulating eosinophil expansion and contributing to allergic inflammation and anti-parasitic defenses. IL - 25 binds to a heterodimeric receptor complex composed of IL - 17RA and IL - 17RB. This binding initiates signaling cascades that lead to the activation of downstream immune - related pathways. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant rat IL-25 and recombinant human IL17RA .Briefly, biotin-linked IL-25 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to IL17RA-coated microtiter wells and incubated for 1h at 37 °C . Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then 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 450nm immediately. The binding activity of recombinant rat IL-25 and recombinant human IL17RA was shown in Figure 1, the EC50 for this effect is 0.59ug/mL.

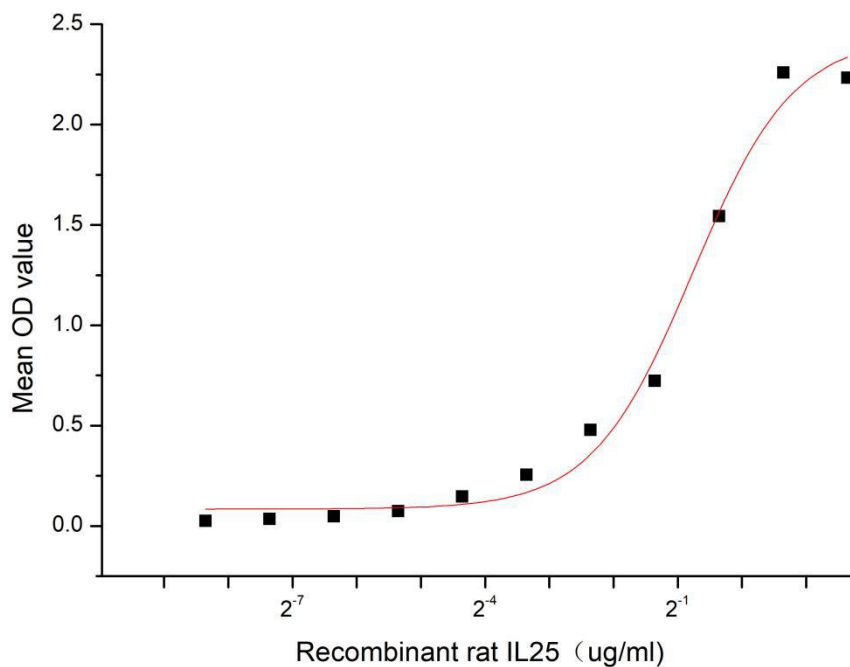


Figure 1. The binding activity of recombinant rat IL-25 and recombinant human IL17RA

[IDENTIFICATION]

CGGCGGGGAGCCATATGGCTAGCATGACTGGTGG/CAGGCAATGGGTCCGGATCCCGCAGCAACAAAGAAATTCOCOG/GGAGTGGCTGAGGTGGAAACCTTGACCTGTGTCTCCCGAGAGGCTCTGAGGGCAACCCACACCAAGAAATCTGTGAGGGCCAGCAAGGACGGCCCTCTCAACA

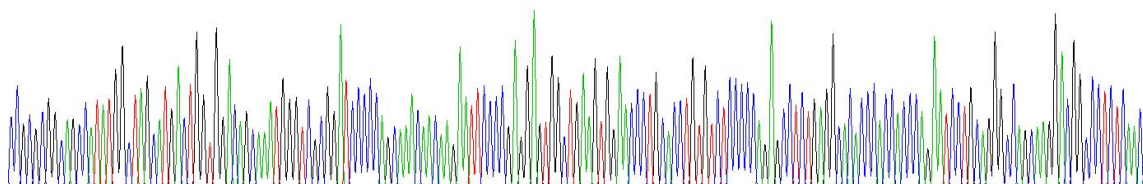


Figure 2. Gene Sequencing (extract)

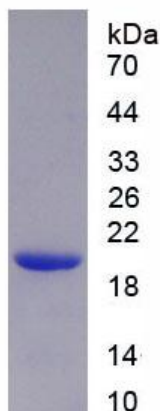


Figure 3. SDS-PAGE

Sample: Active recombinant IL25, 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.