

APP358Mu01 100µg

Active Wingless Type MMTV Integration Site Family, Member 10A (WNT10A)

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: Ser108~Pro343

Tags: N-terminal His and GST Tag

Purity: >80%

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

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

Original Concentration: 50µg/mL

Applications: Cell culture; Activity Assays.

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

Predicted isoelectric point: 9.1

Predicted Molecular Mass: 56.0kDa

Accurate Molecular Mass: 56kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in ddH₂O to a concentration of 0.1-0.5 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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SSL ETRNKVPYES PIFSRGFRES AFAYAIAAAG VVHAVSNACA
LGKLGKACGCD ASRRGDDEAF RRKLHRLQLD ALQRGKGLSH GVPEHPAILP
ASPLQDSWE WGGCSPDVGF GERFSKDFLD SREPHRDIHA RMRLHNNRVG
RQAVMENMRR KCKCHGTS GS CQLKTCWQVT PEFRTVGALL RNRFHRTL I
RPHNRNGGQL EPGPAGAPSP APGTPGLRRR ASHSDLVYFE KSP
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[ACTIVITY]

Wingless Type MMTV Integration Site Family, Member 10A (WNT10A) is a ligand for members of the frizzled family of seven transmembrane receptors. It is involved in the regulation of cell proliferation, differentiation, migration, and apoptosis. Overexpression of WNT10A has been associated with various diseases, including cancer, where it can contribute to tumorigenesis through activation of the Wnt-beta-catenin-TCF signaling pathway. LRP5 and LRP6, as co-receptors of Wnt signal, play a key role in the signal transduction process, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse WNT10A and recombinant rat LRP5. Briefly, WNT10A was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to LRP5-coated microtiter wells and incubated for 1h at 37 °C . Wells were washed with PBST and incubated for 1h with anti-WNT10A 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 450/630 nm immediately. The binding activity of recombinant mouse WNT10A and recombinant rat LRP5 was shown in Figure 1, the EC50 for this effect is 0.026 ug/mL.

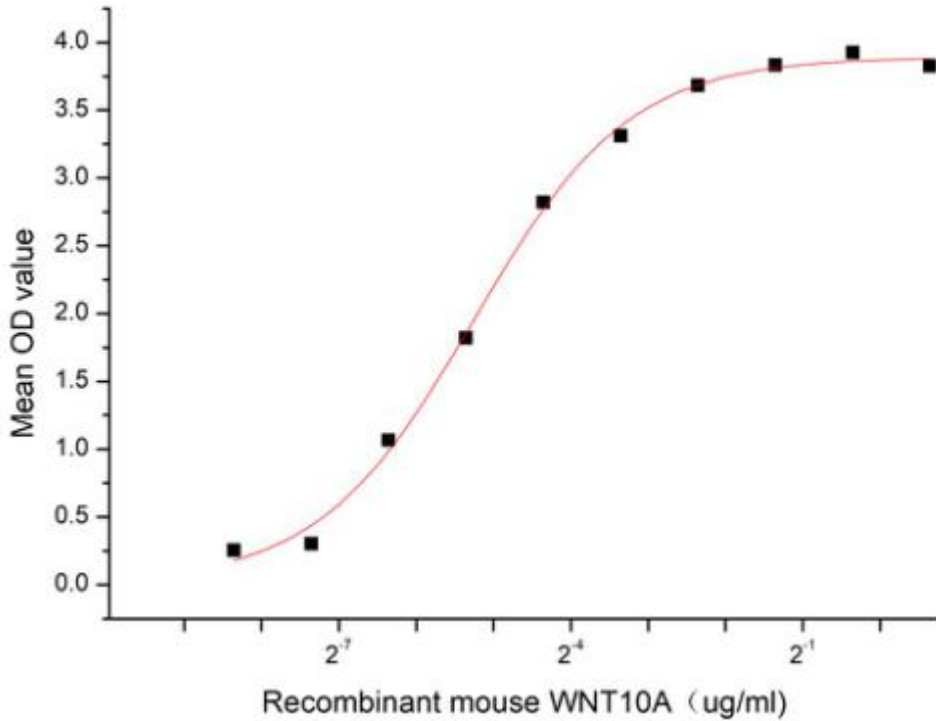


Figure 1. The binding activity of recombinant mouse WNT10A and recombinant rat LRP5

[IDENTIFICATION]

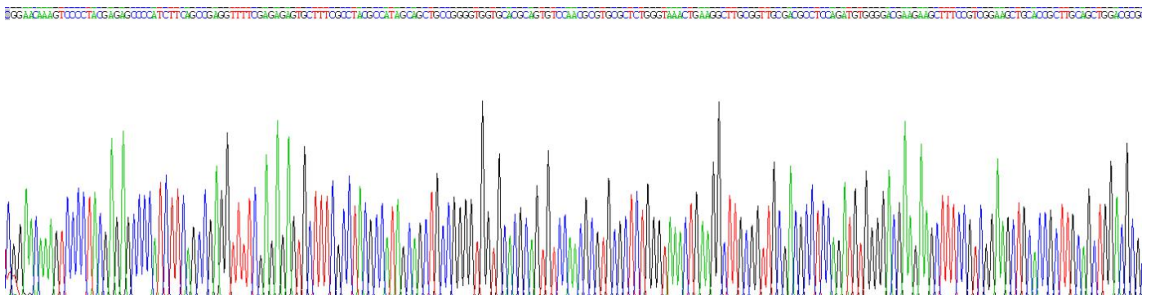


Figure 2. Gene Sequencing (extract)

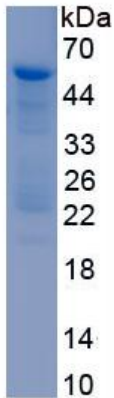


Figure 3. SDS-PAGE

Sample: Active recombinant WNT10A, 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.