

APA302Mu01 100µg

Active Galectin 2 (GAL2)

Organism Species: *Mus musculus* (Mouse)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Met1~Glu130

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.

Applications: Cell culture; Activity Assays.

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

Predicted isoelectric point: 6.9

Predicted Molecular Mass: 16.1kDa

Accurate Molecular Mass: 15kDa 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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MSEKFEVKDL NMKPGMSLKI KGKIHNDVDR FLINLGQGKE TLNLHFNPRF DESTIVCNTS  
EGGRWGQEQR ENHMCFSPPS EVKITITFQD KDFKVTLPDG HQLTFPNRLG HNQLHYLSMG  
GLQISSFKLE]
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[ACTIVITY]

Galectin 2 (GAL2) belongs to the proto type group and consists of two homologous carbohydrate recognition domains (CRDs) resulting in multiple sugar binding sites. The expression of gal-2 has been shown to be involved in processes of angiogenesis and inflammation but was not analyzed before in preeclamptic (PE) placentas. It also can agglutinate red blood. In this case, chose rabbit erythrocyte (RaE) to assay its ability of agglutination. A general procedure for hemagglutination assay (or haemagglutination assay; HA) is as follows, two-fold dilute the recombinant mouse GAL2 with 0.9% sodium chloride injection, add 50µL a serial dilution of GAL2 to each well of a U or V-bottom shaped 96-well microtiter plate. The final well serves as a negative control without GAL2, replace with 50µL 0.9% sodium chloride injection. Then add 50µL 1% rabbit erythrocyte to each well and mixed gently. The plate is incubated for 3 hours at room temperature. The results are shown in Figure 1. It was obvious that the minimal effective concentration of GAL2 is 5 µg/ml.

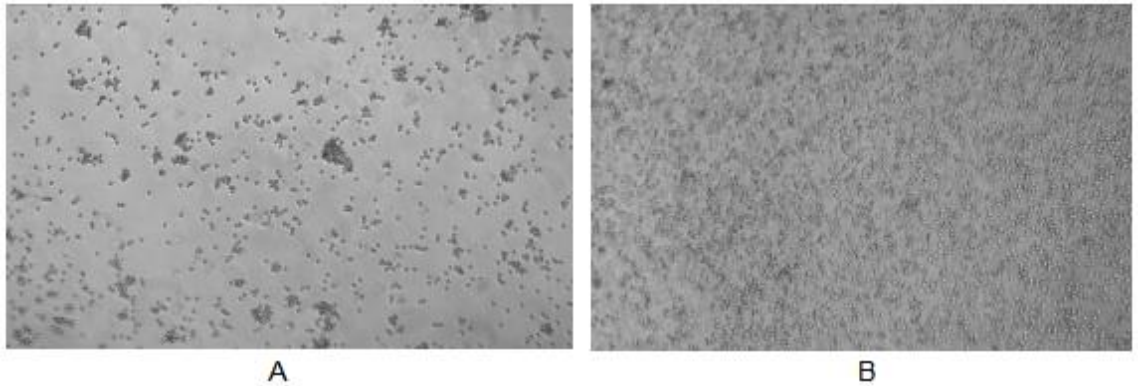


Figure 1. The hemagglutination of recombinant mouse GAL2.

(A) 1% RBC treated with 5 µg/ml GAL2 for 2h;

(B) Negative control without GAL2.

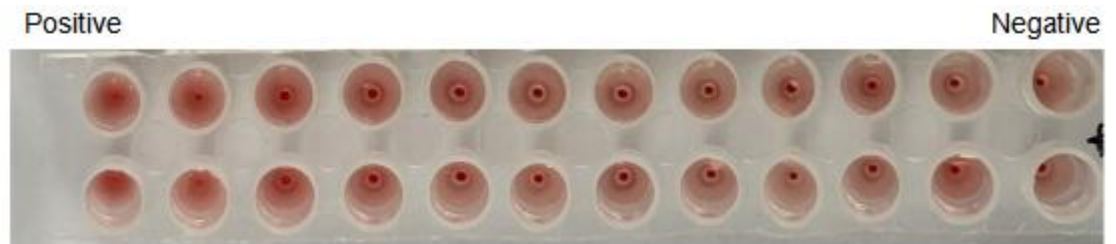


Figure 2. The hemagglutination assay of GAL2 in V- bottom shaped 96-well microtiter plate.

[IDENTIFICATION]



Figure 3. SDS-PAGE

Sample: Active recombinant GAL2, Mouse

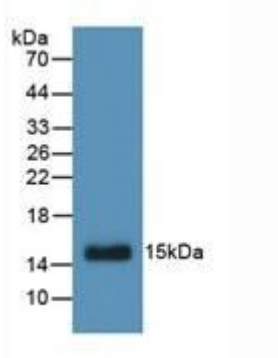


Figure 4. Western Blot

Sample: Recombinant GAL2, Mouse;

Antibody: Rabbit Anti- Mouse GAL2 Ab (PAA302Mu01)

[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.