APA302Po01 100μg
Active Galectin 2 (GAL2)
Organism Species: Sus scrofa; Porcine (Pig)
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~Phe123
Tags: N-terminal His-tag
Purity: >98%
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: 9.3
Predicted Molecular Mass: 16.5kDa
Accurate Molecular Mass: 17kDa 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.

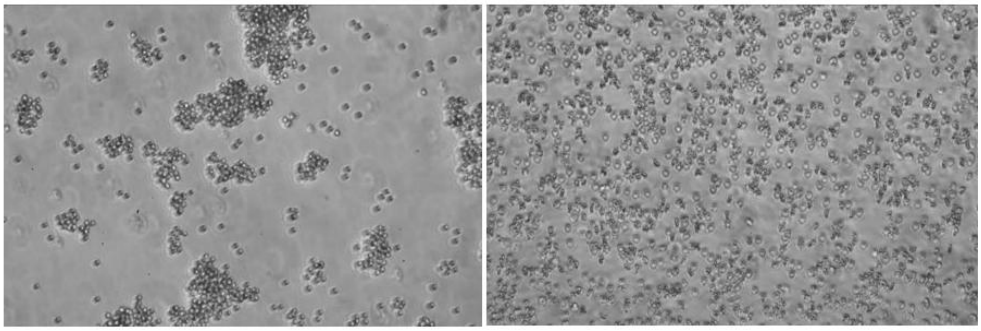
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

MSGKVEIMNM DMKVGKTLKI KGKXDDDADG FXINLGQGTD KLALHFXPRF GESTIXCNXR DGNXWGKEQR DSHMXFXPGS EVKLIVTFEE DGFKVKLPDG HQLTFPNRLG YSHLRYLSVQ XGF

[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 pig 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 2.5μg/ml.



A B

Figure 1. The hemagglutination of recombinant pig GAL2.

(A) 1% RaE tread with 2.5 μg/ml GAL2 for 2h;

(B) Negative control without GAL2.

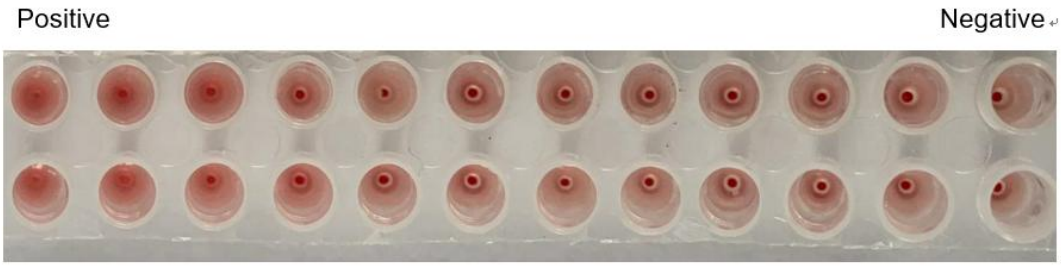


Figure 2. The hemagglutination assay of GAL2 in V- bottom shaped 96-well microtiter plate

[IDENTIFICATION]

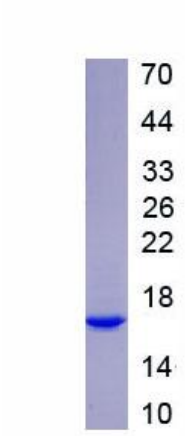


Figure 3. SDS-PAGE

Sample: Active recombinant GAL2, Pig

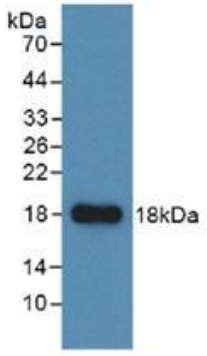


Figure 4. Western Blot

Sample: Recombinant GAL2, Pig;

Antibody: Rabbit Anti- Pig GAL2 Ab (PAA302Po01)

[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.