

APA315Mu01 100μg Active Galectin 6 (GAL6)

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~Ile301
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: 9.1

Predicted Molecular Mass: 37.8kDa

Accurate Molecular Mass: 38kDa 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]

MAYVPAPGYQ PTYNPTLPYK RPIPGGLSVG MSFYIQGTAK ENMRRFHVNF AVGQDDGADV AFHFNPRFDG WDKVVFNTKQ SGRWGKEEEK SMPFQKGKHF ELVFMVMPEH YKVVVNGSPF YEYGHRLPVQ MVTHLQVDGD LELQSINFFG VQPAETKYPA MTGPPVFNPC LPYVGALQGG FTVRRTIIIK GYVLPTAKTF AINFRVGSSE DIALHINPRI GDCLVRNSYM NGSWGTEERM VAYNPFGPGQ FFDLSIRCGM DRFKVFANGI HLFNFSHRFQ ALRKINTLEI NGDLTLSYVH I

[ACTIVITY]

Galectin-6(GAL6) is a protein that in humans is encoded by the LGALS6 gene. The galectins constitute a large family of carbohydrate-binding proteins with specificity for N-acetyl-lactosamine-containing glycoproteins. At least 14 mammalian galectins, which share structural similarities in their carbohydrate recognition domains (CRD), have been identified. Galectin-6 may also be involved in cell-cell and cell-matrix interactions and exogenous galectin has been found to accelerate the re-epithelialization of wounds. It can agglutinate red blood. In this case, we 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 Mu GAL6 with 0.9% sodium chloride injection, add 50µL a serial dilution of GAL6 to each well of a U or V-bottom shaped 96-well microtiter plate. The final well serves as a negative control with no GAL6, 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 GAL6 is 3.125 µg/mL.

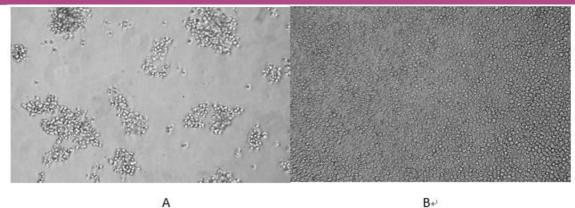


Figure 1. The hemagglutination of recombinant Mu GAL6

- (A) Rabbit erythrocyte agglutinated by recombinant mouse GAL6;
 - (B) Rabbit erythrocyte without recombinant mouse GAL6.

Negative Positive

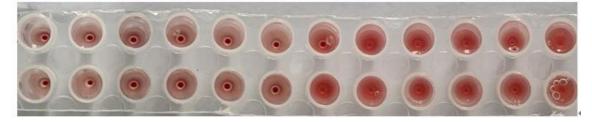


Figure 2. The hemagglutination assay of GAL6 in V- bottom shaped 96-well microtiter plate.

[IDENTIFICATION]

Cloud-Clone Corp.

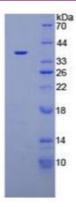


Figure 3. SDS-PAGE

Sample: Active recombinant GAL6, Mouse

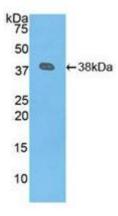


Figure 4. Western Blot

Sample: Recombinant GAL6, Mouse;

Antibody: Rabbit Anti- Mouse GAL6 Ab (PA A315Mu01)

[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.