

**APA308Hu01 100µg**

**Active Galectin 8 (GAL8)**

**Organism Species: *Homo sapiens (Human)***

***Instruction manual***

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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1st Edition (Apr, 2016)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Met1~Trp317

**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:** 8.3

**Predicted Molecular Mass:** 37.1kDa

**Accurate Molecular Mass:** 37kDa 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.

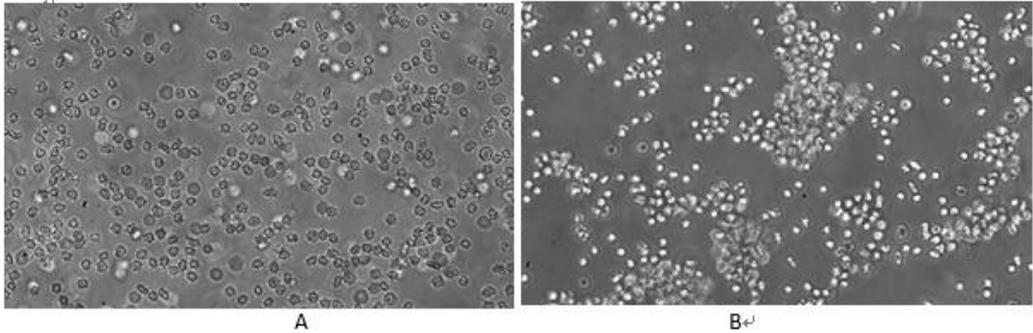
**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration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

## **[ SEQUENCE ]**

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MMLSLNQLQN IYNPVIPIV GTIPDQLDPG TLIVIRGHVP SDADRFQVDL QNGSSMKPRA
DVAHFHFNPRF KRAGCIVCNT LINEKWGREE ITYDTPFKRE KSFEIVIMVL KDKFQVAVNG
KHTLLYGHRI GPEKIDTLGI YGKVNHSIG FSFSDLQST QASSLELLEI SRENVPKSGT
PQLRLPFAAR LNTPMGPGRT VVVKGEVNAN AKSFNVDLLA GKSKDIALHL NPRLNIAKAFV
RNSFLQESWG EEERNITSFP FSPGMYFEMII IYCDVREFKV AVNGVHSLEY KHRFKELSSI
DTLEINGDIH LLEVRSW
```

## **[ ACTIVITY ]**

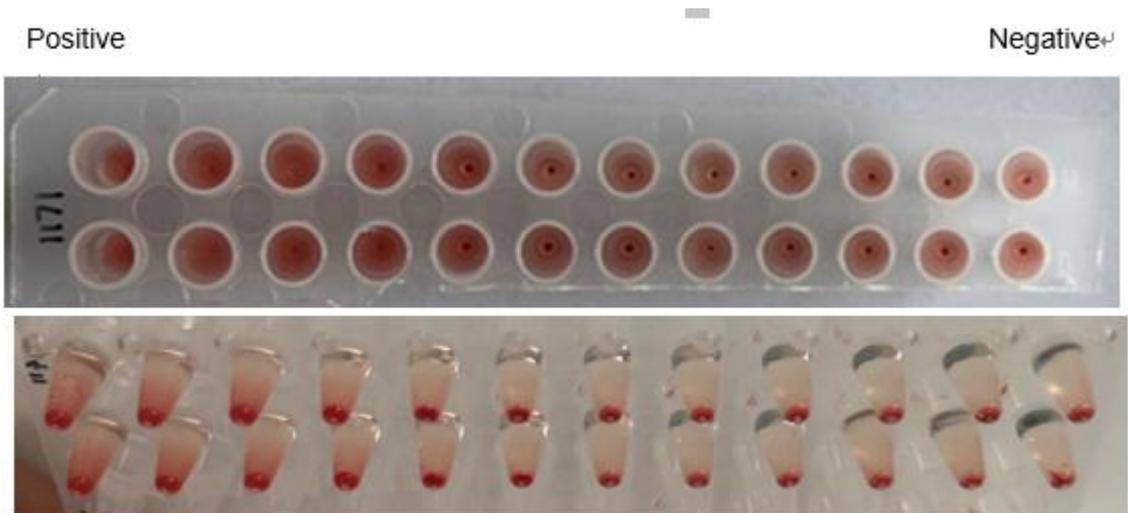
T Galectin 8 (GAL8), also known as prostate carcinoma tumor antigen 1 (PCTA1) in human, is a tandem repeat-type galectin. is a member of the lectin family, of which 14 mammalian galectins have been identified. It is also a member of the beta-galactoside-binding protein family that plays an important role in cell-cell adhesion, cell-matrix interactions, macrophage activation, angiogenesis, metastasis, apoptosis. 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 human GAL8 with 0.9% sodium chloride injection, add 50µL a serial dilution of GAL8 to each well of a U or V-bottom shaped 96-well microtiter plate. The final well serves as a negative control with no GAL8, 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 GAL8 is 6.25µg/mL.



**Figure 1. The hemagglutination of recombinant human GAL8**

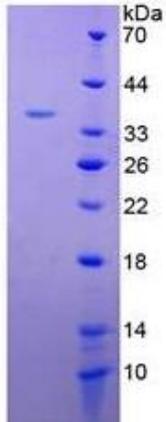
(A) Rabbit erythrocyte reacted with no GAL8 for 3h;

(B) Rabbit erythrocyte reacted with 50ug/ml GAL8 for 3h.



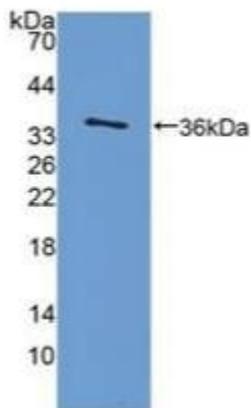
**Figure 2. The hemagglutination assay of GAL8 in V- bottom shaped 96-well microtiter plate.**

**[ IDENTIFICATION ]**



**Figure 3. SDS-PAGE**

Sample: Active recombinant GAL8, Human



**Figure 4. Western Blot**

Sample: Recombinant GAL8, Human;

Antibody: Rabbit Anti- Human GAL8 Ab (PAA308Hu01)

**[ 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.