Active Galectin 8 (GAL8) Instruction Manual

SBPA113Ra01

Rattus norvegicus (Rat)

Buffer Formulation 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA,

1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits Freeze-dried powder

Purity > 95% Isoelectric Point 7.6

Applications Cell culture; Activity Assays.

ACTIVITY TEST

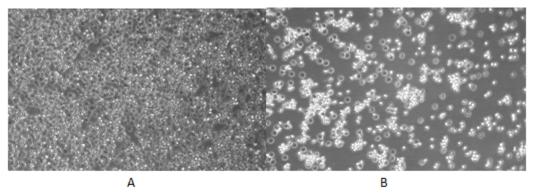


Figure 1. The hemagglutination of recombinant Rat GAL8

- (A) Rabbit erythrocyte reacted with no GAL8 for 3h;
- (B) Rabbit erythrocyte reacted with 50ug/ml GAL8 for 3h.

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 Rat 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 $1.5625 \,\mu\text{g/mL}$.

USAGE

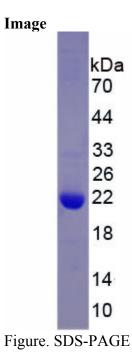
Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

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.



[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.