# Active Galectin 9 (GAL9) Instruction Manual

# SBPA114Mu01

#### Mus musculus (Mouse)

<b>Buffer Formulation</b>	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Traits	Freeze-dried powder
Purity	> 97%
Isoelectric Point	8.0
Applications	Cell culture; Activity Assays.

#### ACTIVITY TEST

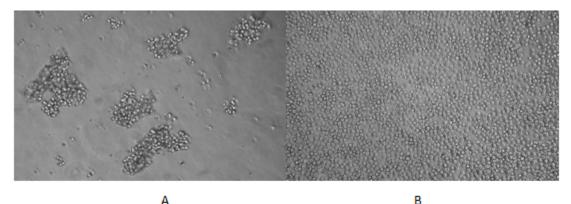


Figure 1. The hemagglutination of recombinant Mouse GAL9

(A) Rabbit erythrocyte agglutinated by recombinant mouse GAL9;

(B) Rabbit erythrocyte without recombinant mouse GAL9.

Galectin 9 (GAL9) is a member of the  $\beta$ -galactoside–binding galectin family. Galectin-9 is found outside of cells and may be exported by non-classical pathways. Galectin 9 exhibits a variety of biological activities, the majority of which have focused on its immunomodulatory role toward lymphocytes, were it shows specific interactions with TIM-3, and can negatively regulate Th1 type immunity. It also 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 GAL9 with 0.9% sodium chloride injection, add 50µL a serial dilution of GAL9 to each well of a U or V-bottom shaped 96-well microtiter plate. The final well serves as a negative control with no GAL9, 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 GAL9 is  $6.25 \ \mu g/mL$ .

#### 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.

Image

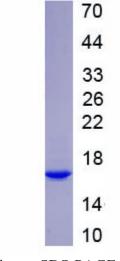


Figure. SDS-PAGE

## [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.