

## Galectin 3 Active Protein | GAL3 active protein

Active Galectin 3 (GAL3)

CATALOG #  
**AAA150087**

APPLICATIONS  
**Activity Assay, Cell Culture**

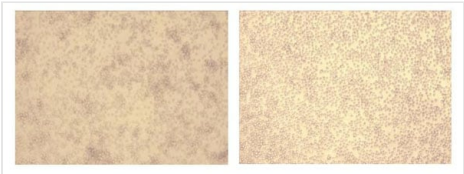
### PRODUCT SYNONYMS

Galectin 3; Active Galectin 3 (GAL3); LGALS3; CBP35; GALBP; GALIG; MAC2; 35 kDa lectin; Carbohydrate-binding protein 35; Galactose-specific lectin 3; Galactoside-binding protein; Laminin-binding protein; Lectin L-29; GAL3 active protein

### PRODUCT SPECIFICATIONS

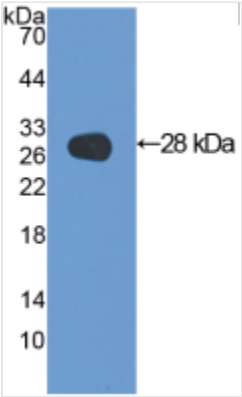
|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity/Purification                             | >90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Form/Format                                     | Freeze-dried powder<br>20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.                                                                                                                                                                                                                                                                                                                                                            |
| Sequence Positions                              | Met1~Ile262                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sequence Length                                 | 131                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Applicable Applications for GAL3 active protein | Activity Assay, Cell Culture                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Species                                         | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Tag                                             | N-terminal His Tag                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Isoelectric Point                               | 8.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Reconstitution                                  | Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                                                                                                                                                                                                                                                                                                                                                                                     |
| Preparation and Storage                         | Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles.<br><br>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 degree 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. |

IMAGES

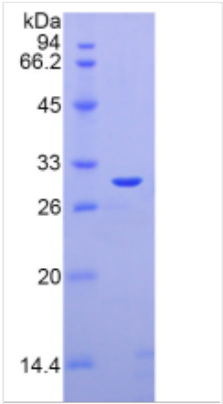


Application Data

Galectin 3 (GAL3) 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. The protein also has been demonstrated to be involved in cancer, inflammation and fibrosis, heart disease, and stroke. GAL3 is expressed in the nucleus, cytoplasm, mitochondrion, cell surface, and extracellular space. It also can agglutinate red blood. In this case, we choose rabbit erythrocyte (RaE) to assay its ability of agglutination. A general procedure for hemagglutination assay (HA) is as follows, two-fold dilute the recombinant rat GAL3 with 0.01M PBS (pH7.4), add 50L a serial dilution of GAL3 to each well of a U or V-bottom shaped 96-well microtiter plate. The final well serves as a negative control with no GAL3, replace with 50L 0.01M PBS. Then add 50L 1% RaE to each well and mixed gently. The plate is incubated for 1-2 hours at room temperature. The results are shown in Figure 1. The minimal effective concentration of GAL3 is 2.5g/mL. (A) 1% RaE treated with 2.5g/mL GAL3 for 2h; (B) Negative control without GAL3. Figure. The hemagglutination activity of recombinant rat GAL3.



WB (Western Blot)  
Figure. Western Blot



SDS-PAGE  
Figure. SDS-PAGE

ADDITIONAL INFORMATION

|                                                   |                    |
|---------------------------------------------------|--------------------|
| Product Categories/Family for GAL3 active protein | Infection immunity |
|---------------------------------------------------|--------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                     |
|----------------------------------|---------------------------------------------------------------------|
| NCBI GI #                        | 149033557                                                           |
| NCBI GeneID                      | 83781                                                               |
| UniProt Accession #              | P08699                                                              |
| Molecular Weight                 | Predicted Molecular Mass: 28.5kDa<br>Accurate Molecular Mass: 28kDa |
| NCBI Official Full Name          | lectin, galactose binding, soluble 3, isoform CRA_c                 |
| NCBI Official Synonym Full Names | galectin 3                                                          |
| NCBI Official Symbol             | Lgals3                                                              |
| NCBI Official Synonym Symbols    | L-34; CBP30; gal-3; AGE-R3                                          |

|                            |               |
|----------------------------|---------------|
| NCBI Protein Information   | galectin-3    |
| UniProt Protein Name       | Galectin-3    |
| UniProt Gene Name          | <b>Lgals3</b> |
| UniProt Synonym Gene Names | Gal-3; CBP 35 |
| UniProt Entry Name         | LEG3_RAT      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/gal3-active-protein/galectin-3/150087>