

## Galectin 9 (GAL9) Active Protein | GAL9 active protein

Active Galectin 9 (GAL9)

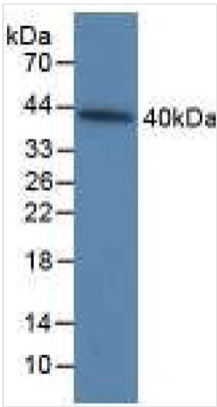
|                              |                        |                                           |                                                     |
|------------------------------|------------------------|-------------------------------------------|-----------------------------------------------------|
| CATALOG #<br><b>AAA21103</b> | HOST<br><b>E. coli</b> | REACTIVITY<br><b>Homo sapiens (Human)</b> | APPLICATIONS<br><b>Cell Culture, Activity Assay</b> |
|------------------------------|------------------------|-------------------------------------------|-----------------------------------------------------|

### PRODUCT SYNONYMS

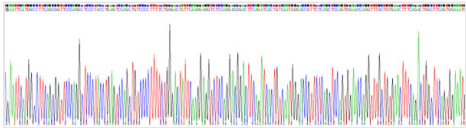
Galectin 9 (GAL9); Active Galectin 9 (GAL9); LGALS9; Ecalectin; Lectin; Galactoside-Binding Soluble 9; Tumor antigen HOM-HD-21; GAL9 active protein

### PRODUCT SPECIFICATIONS

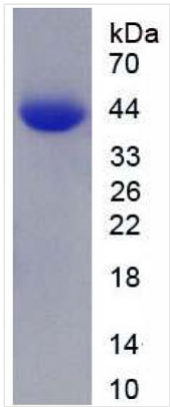
|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Reactivity                                      | Homo sapiens (Human)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Purity/Purification                             | >90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Form/Format                                     | 20mM Tris, 150mM NaCl, pH8.0, containing 0.01% skl, 5% Trehalose.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Concentration                                   | Original Concentration: 200ug/mL (varies by lot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Applicable Applications for GAL9 active protein | Cell Culture, Activity Assay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Application Notes                               | (May be suitable for use in other assays to be determined by the end user.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Source                                          | Prokaryotic expression.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Residues                                        | Met1~Thr323                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Tags                                            | N-terminal His-Tag.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Endotoxin Level                                 | <1.0EU per 1ug (determined by the LAL method).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Predicted isoelectric point                     | 8.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Usage                                           | Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Preparation and Storage                         | <p><b>Storage:</b><br/> Avoid repeated freeze/thaw cycles.<br/> Store at 2-8 degree C for one month.<br/> Aliquot and store at -80 degree C for 12 months.</p> <p><b>Stability Test:</b><br/> 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.</p> |



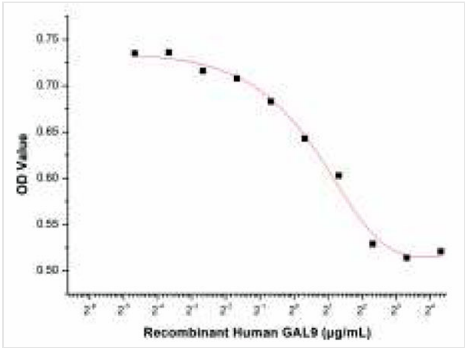
**WB (Western Blot)**  
Western BlotSample: Recombinant GAL9, Human;Antibody: Rabbit Anti-Human GAL9 Ab



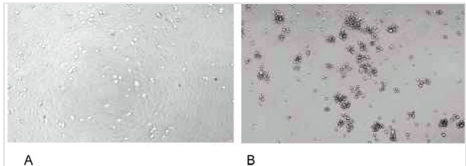
**Application Data**  
Gene Sequencing (extract)



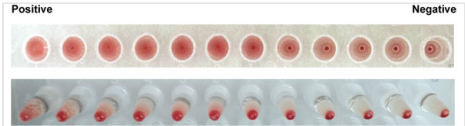
**SDS-Page**  
SDS-PAGESample: Active recombinant GAL9, Human



**Application Data**  
Inhibition of Jurkat cells proliferation after stimulated with GAL9.



**Application Data**  
GAL9 also can induce cellular apoptosis. To test the effect of GAL9 on cell apoptosis, Jurkat cells were seeded into 96-well plates at a density of 5,000 cells/well with 2% serum standard RPMI 1640 including various concentrations of recombinant human GAL9. After incubated for 48 h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 20 uL of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 4 h at 37 degree C. Proliferation of Jurkat cells after incubation with GAL9 for 48 h observed by inverted microscope was shown in Figure 3. Cell viability was assessed by CCK-8 assay after incubation with recombinant human GAL9 for 48 h. The result was shown in Figure 4. It was obvious that GAL9 significantly inhibit cell viability of Jurkat cells. The ED50 is 1.64 ug/mL. Inhibition of Jurkat cells proliferation after stimulated with GAL9(A) Jurkat cells cultured in RPMI 1640, stimulated with 2.5ug/mL GAL9 for 48h;(B) Unstimulated Jurkat cells cultured in RPMI 1640 for 48h.



**Application Data**  
The hemagglutination assay of GAL9 in V- bottom shaped 96-well microtiter plate

ADDITIONAL INFORMATION

|                                                      |                    |
|------------------------------------------------------|--------------------|
| Product Categories/Family for GAL9<br>active protein | Infection immunity |
|------------------------------------------------------|--------------------|

NCBI AND UNIPROT INFORMATION

|             |            |
|-------------|------------|
| NCBI GI #   | 1054470958 |
| NCBI GeneID | 3965       |

|                                  |                                                                                                                                                                                                                                |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI Accession #                 | <a href="#">NP_001317092.1</a>                                                                                                                                                                                                 |
| NCBI GenBank Nucleotide #        | <a href="#">NM_001330163.1</a>                                                                                                                                                                                                 |
| UniProt Accession #              | <a href="#">O00182</a> ; <a href="#">O14532</a> ; <a href="#">O75028</a> ; <a href="#">Q3B8N1</a> ; <a href="#">Q53FQ0</a> ; <a href="#">Q8WYQ7</a> ; <a href="#">Q9NQ58</a> ; <a href="#">A7VJG6</a> ; <a href="#">F8W9W4</a> |
| Molecular Weight                 | Predicted Molecular Mass: 39.6kDa<br>Accurate Molecular Mass: 40kDa as determined by SDS-PAGE reducing conditions.                                                                                                             |
| NCBI Official Full Name          | galectin-9 isoform 3                                                                                                                                                                                                           |
| NCBI Official Synonym Full Names | galectin 9                                                                                                                                                                                                                     |
| NCBI Official Symbol             | LGALS9                                                                                                                                                                                                                         |
| NCBI Official Synonym Symbols    | HUAT; LGALS9A                                                                                                                                                                                                                  |
| NCBI Protein Information         | galectin-9                                                                                                                                                                                                                     |
| UniProt Protein Name             | Galectin-9                                                                                                                                                                                                                     |
| UniProt Gene Name                | <b>LGALS9</b>                                                                                                                                                                                                                  |
| UniProt Synonym Gene Names       | Gal-9                                                                                                                                                                                                                          |

**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://stage.aaabiotech.com/e-coli-homo-sapiens-human-active-protein/galectin-9-gal9/21103>