

# **DATA SHEET**

## GFH30

### Recombinant Human Galectin-1

### Description

Galectin-1 belongs to the lectin family of carbohydrate binding proteins and binds glycans as both a monomer and a homodimer. Galectin-1 is produced in peripheral lymphoid organs and inflammatory sites. Galectin-1 plays important roles in acute and chronic inflammatory processes, cell growth, cell proliferation, and induces apoptosis of activated T cells. Galectin-1 also modulates cytokine secretion and inhibits pro-inflammatory cytokine production.

| Length           | 135 aa  |
|------------------|---|
| Molecular Weight | 14.7 kDa  |
| Source           | E. coli   |
| Accession Number | P09382  |
| Purity           | ≥95% determined by reducing and non-reducing SDS-PAGE |

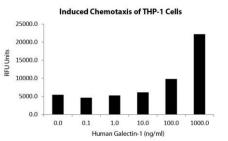
### **Specifications**

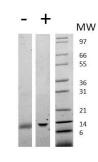
| Alternative Names          | β-galactoside-binding lectin L-14-I, galaptin, S-LAC lectin-I, L-14   |
|----------------------------|---|
| <b>Biological Activity</b> | Human Galectin-1 is fully biologically active when compared to standard. The activity is determined by the ability to chemoattract for human blood monocytes and it is typically between 0.5 - 3.0 µg/ml. |
| Endotoxin Level            | ≤1.00 EU/µg as measured by kinetic LAL  |
| Formulation                | Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5   |
| AA Sequence                | MACGLVASNL NLKPGECLRV RGEVAPDAKS FVLNLGKDSN NLCLHFNPRF NAHGDANTIV<br>CNSKDGGAWG TEQREAVFPF QPGSVAEVCI TFDQANLTVK LPDGYEFKFP NRLNLEAINY<br>MAADGDFKIK CVAFD  |

#### Preparation and Storage

| Reconstitution        | Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions. |
|-----------------------|---|
| Stability and Storage | 12 months from date of receipt when stored at -20°C to -80°C as supplied.<br>1 month when stored at 4°C after reconstituting as directed.<br>3 months when stored at -20°C to -80°C after reconstituting as directed.   |

Data





Induced chemotaxis of THP-1 cells assay for Human Galectin-1. Cell migration was counted using a luminescent substrate, significant increase in the migration levels is verified in response to Galectin-1. Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1  $\mu$ g of protein was loaded in each lane. Human Galectin-1 has a predicted Mw of 14.7 kDa.

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