



# Recombinant Human Galectin-1

20180418BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-175S</b>
<b>Size:</b>	10 µg
<b>Lot. No.:</b>	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	3956
<b>Synonyms:</b>	galectin-1; HBL; HPL; gal-1; HLBP14; galaptin; galectin 1; 14 kDa lectin; S-Lac lectin 1; lactose-binding lectin 1; 14 kDa laminin-binding protein; putative MAPK-activating protein PM12;

Lectins, of either plant or animal origin, are carbohydrate binding proteins that interact with glycoprotein and glycolipids on the surface of animal cells. The Galectins are lectins that recognize and interact with  $\beta$ -galactoside moieties. Galectin-1 is an animal lectin that has been shown to interact with CD3, CD4, and CD45. It induces apoptosis of activated T-cells and T-leukemia cell lines and inhibits the protein phosphatase activity of CD45. Recombinant human Galectin-1 is a 14.5 kDa protein containing 134 amino acid residues.

## Sequence

ACGLVASNLNLPGECLRVRGVAPDAKSFVLNLGKDSNNLCLHFNPRFNAH  
GDANTIVCNSKDGAWGTEQREAVFPFQPGSVAEVCITFDQANLTVKLPDGY  
EFKFPNRLNLEAINYMAADGDFKIKCVAFD

## Database References

<b>Protein RefSeq:</b>	NP_002296.1
<b>Uniprot ID:</b>	P09382
<b>mRNA RefSeq:</b>	NM_002305.3

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 98% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	134
<b>MW:</b>	14.5 kDa

**Stability:** The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 3 months at -20°C to -80°C.

**Reconstitution:** Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Biological Activity:** Determined by its ability to chemoattract human blood monocytes. Chemotactic activity was observed at a concentration of 2.5 µg/ml with a peak response obtained at 250 µg/ml.