

**BACKGROUND**

Galectin-1 belongs to a large family of carbohydrate-binding proteins called lectins. Galectin-1 can be either monomeric or homodimeric and is found in a wide variety of cells and tissue types. Galectin-1 can control cell growth, proliferation, induce apoptosis of activated T cells while it can also modulate cytokine secretion or inhibit pro-inflammatory cytokine production. Galectin-1 plays an important role in acute and chronic inflammation.

Recombinant human Galectin-1 is a non-glycosylated protein comprised of 134 amino acids, with a molecular weight of 14.5 kDa.

**Alternative Names:**

Beta-galactoside-binding lectin L-14-I, Galaptin, S-LAC lectin-I, L-14

**Amino Acid Sequence:**

ACGLVASNLN LKPGCELRVR GEVAPDAKSF VLNLGKDSNN  
LCLHFNPRFN AHGDANTIVC NSKDGGAWGT EQREAVFPFQ  
PGSVAEVCIT FDQANLTVKL PDGYEFKFPN RLNLEAINYM  
AADGDFKIKC VAFD

**TECHNICAL INFORMATION**

**Source:** *E.coli*

**Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

Recombinant human Galectin-1 is lyophilized from 10 mM Na<sub>2</sub>PO<sub>4</sub>, pH 7.5.

**Stability:**

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term 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 a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Biological Activity:**

Activity is determined by the ability to induce chemotaxis of human blood monocytes with a reported ED50 ranging from 0.05 – 3.0 ug/ml.

*Products are for research use only. They are not intended for human, animal, or diagnostic applications.*

