

For Research Use Only

# Recombinant Human Galectin-3 protein (His Tag)



Catalog Number: Eg0227

## Basic Information

**Species:**  
Human

**Purity:**  
>95 %, SDS-PAGE

**Tag:**  
His Tag

**EC50:**  
3-12 ng/mL

## Technical Specifications

**Purity:**  
>95 %, SDS-PAGE

**Endotoxin Level:**  
<0.1 EU/  $\mu$ g protein, LAL method

**Source:**  
HEK293-derived Human Galectin-3 protein Ala2-Ile250 (Accession# P17931) with a His tag at the C-terminus.

**GeneID:**  
3958

**Accession:**  
P17931

**Predicted Molecular Mass:**  
26.8 kDa

**SDS-PAGE:**  
32-45 kDa, reducing (R) conditions

**Formulation:**  
Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Immobilized Human Galectin-3 (His tag) at 0.5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human CD146 (GST tag) with a linear range of 3-12 ng/mL.

## Storage and Shipping

### Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

### Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

Galectins are a family of animal lectins defined by shared characteristic amino-acid sequences and affinity for  $\beta$ -galactose-containing oligosaccharides. Galectin-3, a 31-kDa member of the  $\beta$ -galactoside-binding proteins, contains one carbohydrate recognition domain (CRD) and a proline- and glycine-rich N-terminal domain through which is able to form oligomers. Galectin-3 is widely expressed in many normal tissues and a variety of tumors. It is found intracellularly in nucleus and cytoplasm or secreted outside of cell, being present on the cell surface or in the extracellular space. Galectin-3 is involved in various biological processes including cell growth, adhesion, differentiation, apoptosis, angiogenesis, immune response, neoplastic transformation and metastasis. Elevated serum galectin-3 levels have been reported in patients with breast, gastrointestinal, lung, or ovarian cancer, melanoma, and non-Hodgkin's lymphoma.

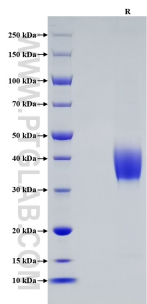
## References

1. Barondes SH. et al. (1994) J Biol Chem. 269(33):20807-10.
2. Iurisci I. et al. (2000) Clin Cancer Res. 6(4):1389-93.
3. Takenaka Y. et al. (2002) Glycoconj J. 19(7-9):543-9.
4. Dumic J. et al. (2006) Biochim Biophys Acta. 1760(4):616-35.

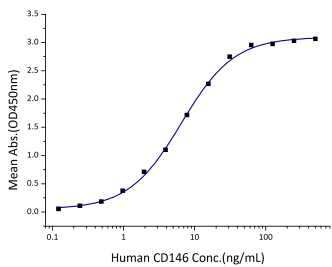
## Synonyms

Galectin-3, 35 kDa lectin, Carbohydrate-binding protein 35, CBP 35, CBP35

Selected Validation Data



Purity of Recombinant Human Galectin-3 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.



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