

**DESCRIPTION**

**Source** Human embryonic kidney cell, HEK293-derived human Galectin-3C protein  
Gly108-Ile250  
Accession # P17931

**N-terminal Sequence Analysis** Gly108

**Structure / Form**

**Predicted Molecular Mass** 16 kDa

**SPECIFICATIONS**

**SDS-PAGE** 14-18 kDa, reducing conditions

**Activity** Measured by its binding ability in a functional ELISA.  
When Recombinant Human Integrin alpha 5 beta 1 Recombinant Human Integrin  $\alpha 5\beta 1$  (Catalog # 3230-A5) is immobilized at 1  $\mu\text{g}/\text{mL}$  (100  $\mu\text{L}/\text{well}$ ), the concentration of Recombinant Human Galectin-3C that produces 50% of the optimal binding response is 1-6  $\mu\text{g}/\text{mL}$ .

**Endotoxin Level** <0.10 EU per 1  $\mu\text{g}$  of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Formulation** Lyophilized from a 0.2  $\mu\text{m}$  filtered solution in HEPES, NaCl, TCEP, PEG and Trehalose. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 500  $\mu\text{g}/\text{mL}$  in water.

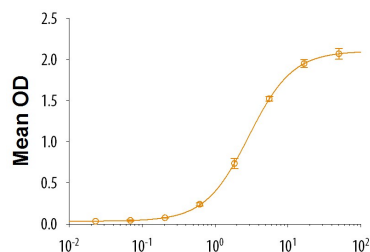
**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

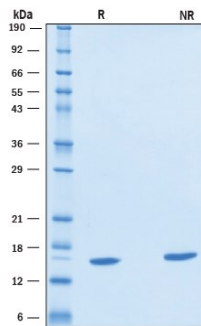
**DATA**

**Binding Activity**



When Recombinant Human Integrin  $\alpha 5\beta 1$  (Catalog # 3230-A5) is coated at 1  $\mu\text{g}/\text{mL}$  (100  $\mu\text{L}/\text{well}$ ), Recombinant Human Galectin-3C (Catalog # 10110-GA) binds with an  $\text{ED}_{50}$  of 1-6  $\mu\text{g}/\text{mL}$

**SDS-PAGE**



2  $\mu\text{g}/\text{lane}$  of Recombinant Human Galectin-3C was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 14-18 kDa.

**BACKGROUND**

Human Galectin-3, also known as Mac-2, L29, CBP35, and epsilon BP, is classified as a chimeric member of the Galectin superfamily and contains one carbohydrate recognition domain (CRD) linked to a nonlectin domain (1, 2). The truncated form, Galectin-3C, which consists of the carboxy-terminal amino acid residues of Galectin-3 and lacks the N-terminal domain, has been shown to inhibit tumor growth and metastasis (3, 4). Within this region, human Galectin-3C shares 87% and 83% amino acid (aa) sequence identity with mouse and rat Galectin-3C, respectively. Galectin-3C has been found to interact with Integrin beta 1 in Hela cell lateral mobility assays (5). It can also be found endogenously attached to cell surface of neutrophils (6). Galectin-3C has been shown to enhance the activity of cancer therapy drugs as well as inhibiting tubule formation during angiogenesis (3).

**References:**

1. Robertson, M.W. *et al.* (1990) *Biochemistry* **29**:8093.
2. Elola, M.T. *et al.* (2007) *Cell. Mol. Life Sci.* **64**:1679.
3. Mirandola, L. *et al.* (2011) *PLoS One* **6**:e21811.
4. John, C.M. *et al.* (2003) *Clin. Cancer Res.* **9**:2374.
5. Yang, E.H. *et al.* (2017) *PLoS ONE* **12**:e0184378.
6. Sundqvist, M. *et al.* (2018) *J. Leukoc. Biol.* **103**:341.