

# Galectin-4, human recombinant

**CATALOG #:** 7364-100 100 µg

**ALTERNATE NAMES:** LGALS4, GAL4, L36LBP, Lactose-binding lectin 4.

**SOURCE:** E. coli

**PURITY:** > 95% by SDS-PAGE

**FORM:** Liquid

**FORMULATION:** 1 mg/ml in 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT and 10% glycerol.

**MOL. WEIGHT:** 38.1 kDa (343 aa, 1-323 aa + His Tag).

**STORAGE CONDITIONS:** Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

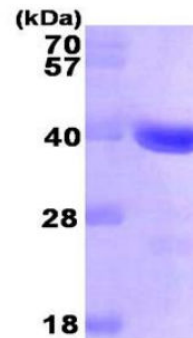
**DESCRIPTION:** Galectin-4 belongs to a subfamily of galectins composed of two carbohydrate recognition domains within the same peptide chain. The galectins are a family of beta-galactosidase-binding proteins implicated in modulating cell-cell and cell-matrix interactions, which inhibits chronic inflammations, GVHD, and allergic reactions. The expression of this gene is restricted to small intestine, colon, and rectum, and it is under expressed in colorectal cancer. Recombinant Galectin-4 protein was expressed in E.coli and purified by using conventional chromatography techniques.

**AMINO ACID SEQUENCE:** MGSSHHHHHH SSGLVPRGSH MAYVPAPGYQ  
 PTYNPTLPYY QPIPGLNVG MSVYIQGVAS EHMKRFFVNF VVGQDPGSDV  
 AFHFNPRFDG WDKVVFNTLQ GKWGWSEERK RSMPFKKGAA FELVFIVLAE  
 HYKVVVNGNP FYEYGHRLPL QMVTHLQVDG DLQLQSINFI GGQPLRPQGP  
 PMMPYPGPG HCHQQLNSLP TMEGPPTFNP PVPYFGRLQG GLTARRTIII  
 KGYVPPTGKS FAINFKVGSS GDIALHINPR MGNQTVVRNS LLNGSWGSEE  
 KKITHNPFPG GQFFDLSIRC GLDRFKVYAN GQHLEDFFAHR LSAFQRVDTL  
 EIQGDVTLSTSY VQI

**BIOLOGICAL ACTIVITY:** The ED<sub>50</sub> for this effect is 10 – 20 µg/ml. Measured by its ability to agglutinate human red blood cells.

**ACTIVITY ASSAY:**

1. Mix equal volumes of human blood and Alsever's solution (pH 7.0). (Alsever's solution: NaCl 0.42 g, Sodium citric acid 0.8 g, Citric acid 0.055 g, D-glucose 2.05 g in DW 100 ml)
2. Centrifuge at high speed for 10 minutes and wash four times with PBS.
3. Dilute packed cells in a 0.5 mg/ml trypsin-EDTA solution to give 4% red cell suspension.
4. Incubate for 1hr at 37°C and wash four times with PBS.
5. Dilute packed cells in PBS to give 4% red cell suspension.
6. Load 50 µl of 0.5% BSA in 0.15 M NaCl solution and 25 µl of 4%-Red-Cell-in-PBS in U shaped wells.
7. Add 25 µl of serial diluted galectin protein in PBS to each well plate. (Round bottom 96 well plate)
8. Incubate for 30 min at room temperature to observe visible agglutination.



15% SDS-PAGE (3ug)  
 Galectin-4, human recombinant

**RELATED PRODUCTS:**

- Galectin-1, human recombinant (Cat. No. 4648-10, -50, -1000)
- Galectin-3, human recombinant (Cat. No. 4684-10, -50, -1000)
- Galectin-7, human recombinant (Cat. No. 4647-10, -50, -1000)
- Galectin-9, human recombinant (Cat. No. 7365-50)
- Galectin-1 Antibody (Cat. No. 3596-100)
- Galectin-3 Antibody (Cat. No. 3591-100)
- Galectin-3 Antibody (Cat. No. 5684-100)
- Galectin-7 Antibody (Cat. No. 5647-100)
- Galectin-9 Antibody (Cat. No. 3827-100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**

