

Datasheet Cat. No. P1594

Recombinant Human Galectin-3

Information

3958
P17931
AGE-R3, CBP35, GAL3, L29, LGALS3, Mac-2
Escherichia coli.
Approximately 26.0 kDa, a single non-glycosylated polypeptide chain containing 249 amino acids.
ADNFSLHDAL SGSGNPNPQG WPGAWGNQPA GAGGYPGASY PGAYPGQAPP GAYPGQAPPG AYPGAPGAYP GAPAPGVYPG PPSGPGAYPS SGQPSATGAY PATGPYGAPA GPLIVPYNLP LPGGVVPRML ITILGTVKPN ANRIALDFQR GNDVAFHFNP RFNENNRRVI VCNTKLDNNW GREERQSVFP FESGKPFKIQ VLVEPDHFKV AVNDAHLLQY NHRVKKLNEI SKLGISGDID LTSASYTMI
Sterile Filtered White lyophilized (freeze-dried) powder.
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
Lyophilized from a 0.2 μ m filtered solution in 1×PBS, 5% Trehalose, 0.02% Tween-20, 3mM β -ME, pH 7.4.
We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.
Fully biologically active when compared to standard. The ED as determined by its ability to agglutinate human red blood cells is less than 10 $\mu\text{g/ml}.$
Gel pack.
Centrifuge the vial prior to opening.
For Research Use Only! Not to be used in humans.

Components and Storage

Components	10µg	100µg	500µg
Recombinant Human Galectin-3	10µg	100µg	500µg

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

Quality Control	19 million	el Que
Purity	> 98 % by SDS-PAGE and HPLC analyses.	Provene and the a
Endotoxin	Less than 0.1 EU/µg of rHuGalectin-3 as determined by LAL method.	

Description

Human Galectin-3 also named AGE-R3, CBP35, GAL3, L29, LGALS3, Mac-2, is belonging to the galectins family and it is encoded by a single gene, LGALS3, located on chromosome 14, locus q21 - q22. It is expressed in the nucleus, cytoplasm, mitochondrion, cell surface, and extracellular space. Galectin-3 is approximately 30 kDa and, like all galectins, contains a carbohydrate-recognition-binding domain (CRD) of about 130 amino acids that enable the specific binding of β -galactosides. Given Galectin-3' s broad biological functionality, it has been demonstrated to be involved in cancer, inflammation and fibrosis, heart disease, and stroke. Studies have also shown that the expression of galectin-3 is implicated in a variety of processes associated with heart failure, including myofibroblast proliferation, fibrogenesis, tissue repair, inflammation, and Ventricular remodeling. Human Galectin-3 shares 79% amino acid sequence identity with rat and mouse Galectin-3, respectively.

Reference

- 1. J Dumic, S Dabelic, M Flogel. 2006. Biochim Biophys Acta, 1760: 616-35
- 2. J Raimond, DB Zimonjic, C Mignon, et al. 1997. Mamm Genome, 8: 706-7
- 3. DN Cooper. 2002. Biochim Biophys Acta, 1572: 209-31
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- 5. YP Yan, BT Lang, R Vemuganti, et al. 2009. Brain Res, 1288: 116-24
- 6. YH Lin, LY Lin, YW Wu, et al. 2009. Clin Chim Acta, 409: 96-9.

