

Galectin-8, human recombinant (rHuLGALS8)

Catalog No: 97460 Lot No: XXXXX Source: *E. coli*

Synonyms: Galectin-8, Gal-8, Po66 carbohydrate-binding protein, Po66-CBP, Prostate carcinoma tumor antigen 1,

PCTA-1, LGALS8

Background

Galectins are a family of animal lectins with an affinity for beta-galactosides. This family has at least 14 identified members. Galectins share similarities in the CRD (the carbohydrate recognition domain). Galectins are synthesized as cytosolic proteins. Though localized principally in the cytoplasm and lacking a classical signal peptide, galectins can also be stimulated to secretion by non-classical pathways or alternatively targeted to the nucleus. Galectins are involved in modulating cell-cell and cell-matrix interactions. Galectin-8 is a tandem-repeat-type member of the galectin family, consisting of 2 CRDs attached by a linker peptide. Galectin-8 is greatly expressed in lung carcinomas, a number of forms of prostate carcinomas, in addition to other tumor cells. Galectin-8 attaches to a subset of cell surface integrins to modulate ECM-integrin interactions. Once immobilized, Galectin-8 promotes cell adhesion by ligation and clustering of cell surface integrin receptors. On the other hand, as a soluble ligand, Galectin-8 can inhibit cell adhesion.

Description

Galectin-8 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 317 amino acids and having a molecular mass of 35.8 kDa. LGALS8 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

LGALS8 was lyophilized from a concentrated (1 mg/ml) solution in 20 mM PBS, pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized Galectin-8 in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized LGALS8, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Galectin-8 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freezethaw cycles.

Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Met-Leu-Ser-Leu.

Activity

The ED50 of Galectin-8 as determined by its ability to agglutinate human red blood cells is 0.8~4 µg/ml.





Usage

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