Datasheet for ABIN1096717

Galectin 3 Protein (LGALS3) (AA 2-250)

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Overview

Quantity:	50 µg
Target:	Galectin 3 (LGALS3)
Protein Characteristics:	AA 2-250
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human Galectin-3/LGALS3 (E. coli)
Sequence:	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
Characteristics:	Recombinant Human Galectin-3 is produced with our E. coli expression system. The target protein is expressed with sequence (Ala2-Ile250) of Human Galectin-3.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Sterility:	0.2 µm filtered
Endotoxin Level:	Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test

Target Details

Target:	Galectin 3 (LGALS3)
Alternative Name:	Galectin-3 (LGALS3 Products)
Target Type:	Chemical
Background:	The Galectin family of proteins (with specificity for Nacetyllactosamine containing glycoproteins) consists of beta-galactoside binding lectins containing homologous carbohydrate recognition domains (CRDs). At least 14 mammalian galectins family members that share structural similarities in their carbohydrate recognition domains (CRD) have been identified to date. Unlike the selectin family of proteins, the carbohydrate binding specificity of galectins is calcium-independent. A common function of galectins is to cross-link structures containing N-acetyl-lactosamine located at the cell surface and within the extracellular matrix. They also possess hemagglutination activity, which is attributable to their bivalent carbohydrate binding properties. Galectins are active both intracellularly and extracellularly. They have diverse effects on many cellular functions including adhesion, migration, polarity, chemotaxis, proliferation, apoptosis, and differentiation. Galectins may therefore play a key role in many pathological states, including autoimmune diseases, allergic reactions, inflammation, tumor cell metastasis, atherosclerosis, and diabetic complications. The galectins have been classified into the prototype galectins (1, 2, 5, 7, 10, 11, 13, 14), which contain one CRD and exist either as a monomer or a noncovalent homodimer. The chimera galectins (Galectin3) containing one CRD linked to a nonlectin domain, and the tandem repeat Galectins (4, 6, 8, 9, 12) consisting of two CRDs joined by a linker peptide. Galectins lack a classical signal peptide and can be localized to the cytosolic compartments where they have intracellular functions. However, via one or more as yet unidentified nonclassical secretory pathways, galectins can also be secreted to function extracellularly. Individual members of the galectin family have different tissue distribution profiles and exhibit subtle differences in their carbohydrate-binding specificities. Each family member may preferentially bind to a unique subset of cell surface glycoproteins. Alternative Names: Galectin-3, Gal-3, 35 kDa Lectin, Carbohydrate-Binding Protein 35, CBP 35, Galactose-Specific Lectin 3, Galactoside-Binding Protein, GALBP, IgE-Binding Protein, L-31, Laminin-Binding Protein, Lectin L-29, Mac-2 Antigen, LGALS3, MAC2
Molecular Weight:	26 kDa
UniProt:	P17931
Pathways:	RTK Signaling

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	It is not recommended to reconstitute to a concentration less than 100 µg/mL. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Buffer:	Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 150 mM NaCl, 2 mM DTT, pH 7.4.
Preservative:	Dithiothreitol (DTT)
Precaution of Use:	This product contains Dithiothreitol (DTT): a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
Storage:	4 °C/-20 °C/-80 °C
Storage Comment:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Expiry Date:	3 months