

Recombinant Human LGALS3

Cat. No. LGALS3-3622H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human Galectin-3 produced in E. coli is a single, non-glycosylated, polypeptide chain containing 250 amino acids and having a molecular mass of 26 kDa.
Species	Human
Source	E.coli
Description	<p>Galectins are a family of animal lectins with an affinity for β-galactosides. There are at least 14 members identified. Galectins share similarities in carbohydrate recognition domain (CRD). Galectins are synthesized as cytosolic proteins. Although localized primarily 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 implicated in modulating cell-cell and cell-matrix interactions. Galectin-3, like all galectins, contains a CRD, while having a distinct chimeric structure with an extra N-terminal tail consisting of 8-13 copies of a 9 aa-repeat consensus sequence that is rich in proline, tyrosine, and glycine. Galectin-3 shares sequence similarity with apoptosis suppressor protein Bcl-2, and due to the Bcl-2-like function, it has been associated with the inhibition of apoptosis and tumor progression. Galectin-3 has also been demonstrated to be involved in heart and skin diseases.</p>
Biological Activity	The ED50 of rHuGalectin-3 as determined by its ability to agglutinate human red blood cells is 3~10 μ g/ml.

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Purity	Greater than 95% as determined by (a) Analysis by RP-HPLC; (b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.
Amino-Acid Sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-Asp-Asn-Phe.
Endotoxin	Less than 0.1ng/μg (1.0EU/μg) of rHuGalectin-3 as determined by LAL test.
Form	The protein was lyophilized from a concentrated (1mg/ml) solution in 20mM PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized rHuGalectin-3 in sterile 18MΩ-cm H2O not less than 100g/ml, which can then be further diluted to other aqueous solutions.
Storage	Lyophilized rHuGalectin-3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuGalectin-3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long-term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles.

GENE INFORMATION

Gene Name	LGALS3 lectin, galactoside-binding, soluble, 3 [Homo sapiens]
Official Symbol	LGALS3
Synonyms	LGALS3; L31; GAL3; MAC2; CBP35; GALBP; GALIG; LGALS2; lectin, galactoside-binding, soluble, 3; galectin-3; lectin L-29; 35 kDa lectin; MAC-2 antigen; IgE-binding protein; laminin-binding protein; galacto- se-specific lectin 3; carbohydrate-binding protein 35; Carbohydrate-binding protein 35; Galactose-specific lectin 3; Laminin-

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binding protein; Lectin L-29; IgE-binding protein; Galactoside-binding protein

Gene ID 3958

mRNA Refseq NM_002306


Protein Refseq NP_002297

MIM 153619

UniProt ID P17931

Chromosome Location 14q22.3

Function IgE binding; protein binding; sugar binding

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