

Recombinant Human LGALS8

Cat. No. LGALS8-3624H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Galectin-8 produced in E. coli is a single, non-glycosylated, polypeptide chain containing 317 amino acids and having a molecular mass of 35.8 kDa.
Species	Human
Source	E.coli
Description	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-8 is a tandem-repeat-type member of galectin family, consisting of two CRDs joined by a linker peptide. Galectin-8 is highly expressed in lung carcinomas, certain forms of prostate carcinomas, as well as other tumor cells. It is also known as prostate carcinoma tumor antigen 1 (PCTA1) in human. Galectin-8 binds to a subset of cell surface integrins to modulate ECM-integrin interactions. When immobilized, Galectin-8 promotes cell adhesion by ligation and clustering of cell surface integrin receptors. In contrast, as a soluble ligand, Galectin-8 can inhibit cell adhesion. Human and mouse Galectin-8 share 80% sequence identity.
Biological Activity	The ED50 of rHuGalectin-8 as determined by its ability to agglutinate human red

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	blood cells is 0.8~4 µg/ml.
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-Met-Leu-Ser-Leu.
Endotoxin	Less than 0.1ng/µg (1.0EU/µg) of rHuGalectin-8 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-8 in sterile 18MΩ-cm H ₂ O not less than 100g/ml, which can then be further diluted to other aqueous solutions.
Storage	Lyophilized rHuGalectin-8 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rHuGalectin-8 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	LGALS8 lectin, galactoside-binding, soluble, 8 [Homo sapiens]
Official Symbol	LGALS8
Synonyms	LGALS8;Gal-8; PCTA1; PCTA-1; Po66-CBP; galectin-8; galectin 8; galectin-8g; OTTHUMP000000037853; OTTHUMP000000037854; OTTHUMP000000037855;

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OTTHUMP00000037957; OTTHUMP00000037958; OTTHUMP00000037959;
 OTTHUMP00000037961; OTTHUMP00000038817; OTTHUMP00000231517;
 OTTHUMP00000231546; Po66 carbohydrate binding protein; po66 carbohydrate-
 binding protein; prostate carcinoma tumor antigen 1; Prostate carcinoma tumor
 antigen 1

Gene ID	3964
mRNA Refseq	NM_006499
Protein Refseq	NP_006490
MIM	606099
UniProt ID	O00214
Chromosome Location	1q43
Function	sugar binding