

Galectin-1 Active Protein | LGALS1 active protein

Recombinant Human Galectin-1

CATALOG #
AAA38590

HOST
E Coli

PRODUCT SYNONYMS

Galectin-1; Recombinant Human Galectin-1; LGALS1 Human; Galectin-1 Human Recombinant; GAL1; GAL-1; Lectin galactoside-binding soluble 1; Beta-galactoside-binding lectin L-14-I; Lactose-binding lectin 1; S-Lac lectin 1; Galaptin; 14 kDa lectin; HPL; HBL; Putative MAPK-activating protein PM12; GBP; DKFZp686E23103; LGALS1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Form/Format	The Galectin-1 protein was lyophilized from a concentrated (1mg/ml) containing 10mM Na2PO4, pH-7.5. Sterile Filtered White lyophilized (freeze-dried) powder.
Sequence	MACGLVASNL NLKPGECLRV RGEVAPDAKS FVLNLGKDSN NLCLHFNPRF NAHGDANTIV CNSKDGGAWG TEQREAVFPF QPGSVAEVCITFDQANLTVK LPDGYEFKFP NRLNLEAINY MAADGDFKIK CVAFD
Sequence Length	135
Solubility	It is recommended to reconstitute the lyophilized LGALS1 in sterile 18M Omega -cm H2O not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.
Protein Content	UV spectroscopy at 280 nm using the absorbency value of 0.59 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
Biological Activity	Human Galectin-1 is a chemoattractant for human blood monocytes. ED50 range is from 0.053.0 ug/ml.
Preparation and Storage	Lyophilized Galectin-1 Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18 degree C. Upon reconstitution Galectin-1 should be stored at 4 degree C between 2-7 days and for future use below -18 degree C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for LGALS1 active protein	Description: LGALS1 Human Recombinant produced in E Coli is a single, non-glycosylated, polypeptide chain containing 134 amino acids and having a molecular mass of 14.5 kDa. The LGALS1 is purified by proprietary chromatographic techniques. Introduction: The galectins are a family of beta-galactoside-binding proteins implicated in modulating cell-cell and cell-matrix interactions. Galectin-1 is an autocrine negative growth factor that regulates cell proliferation. Galectin-1 regulates cell apoptosis and cell differentiation. Galectin-1 binds CD45, CD3 and CD4 & inhibits CD45 protein phosphatase activity and therefore the dephosphorylation of lyn kinase. Galectin-1 and its ligands are one of the master regulators of immune responses as T-cell homeostasis and survival, T-cell immune disorders, inflammation and allergies as well as hostpathogen interactions. Galectin-1 expression or overexpression in tumors and/or the tissue surrounding them must be considered as a sign of the malignant tumor progression that is often related to the long-range dissemination of tumoral cells (metastasis), to their dissemination into the surrounding normal tissue, and to tumor immune-escape. Galectin-1 in its oxidized form plays a number of important roles in the regeneration of the central nervous system after injury. The targeted overexpression (or delivery) of Galectin-1 should be considered as a method of choice for the treatment of some kinds of inflammation-related diseases, neurodegenerative pathologies and muscular dystrophies. In contrast, the targeted inhibition of Galectin-1 expression is what should be developed for therapeutic applications against cancer progression. Galectin-1 is thus a promising molecular target for the development of new and original therapeutic tools. There is 88% homology between the human and mouse galectin-1.
Product Categories/Family for LGALS1 active protein	Cytokines and Growth Factors; Growth Factors; Galectin

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504981
NCBI GeneID	3956
NCBI Accession #	NP_002296.1
NCBI GenBank Nucleotide #	NM_002305.3
UniProt Accession #	P09382; Q9UDK5; B2R5E8
Molecular Weight	14,716 Da
NCBI Official Full Name	galectin-1
NCBI Official Synonym Full Names	lectin, galactoside-binding, soluble, 1
NCBI Official Symbol	LGALS1
NCBI Official Synonym Symbols	GBP; GAL1
NCBI Protein Information	galectin-1; 14 kDa laminin-binding protein; 14 kDa lectin; HBL; HLBP14; HPL; S-Lac lectin 1; beta-galactoside-binding lectin L-14-I; beta-galactoside-binding protein 14kDa; gal-1; galaptin; galectin 1; lactose-binding lectin 1; putative MAPK-activating protein PM12
UniProt Protein Name	Galectin-1
UniProt Gene Name	LGALS1
UniProt Synonym Gene Names	Gal-1; HLBP14
UniProt Entry Name	LEG1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.