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Datasheet for 009-001-U92-0010

rHuman Galectin-3 Protein

Overview

Description:	Human Galectin-3 Recombinant Protein - 009-001-U92-0010
Item No.:	009-001-U92-0010
Size:	10 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Galectin-3 belongs to a large family of carbohydrate-binding proteins called lectins. Galectin-3 is expressed by a wide range of cell types including activated T cells, tumor cells, macrophages, osteoclasts, fibroblasts and epithelial cells and interacts with β-galactoside sugar moieties. Galectin-3 is associated with cancer, heart failure, stroke and inflammation. Human and mouse Galectin-3 share an 80% homology by amino acid sequence. Recombinant human Galectin-3 is a non-glycosylated protein, containing 250 amino acids, with a molecular weight of 26 kDa.
Synonyms:	35 kDa lectin, Galactose-specific lectin-3, Galactoside-binding protein (GALBP), IgE-binding protein, Laminin-binding protein, MAC2, L-29 CPB-35
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	LGALS3
Purity/Specificity:	Galectin-3 purity was determined to be greater than 97% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - P17931

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Galectin-3 Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Galectin-3 in immunological assays. Lyophilized in 10 mM sodium phosphate, 50mM sodium chloride, pH 7.5.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein. Biologic Activity: The activity is determined by the ability to induce chemotaxis of human PBMCs at concentrations ranging from 2-220 µg/mL.

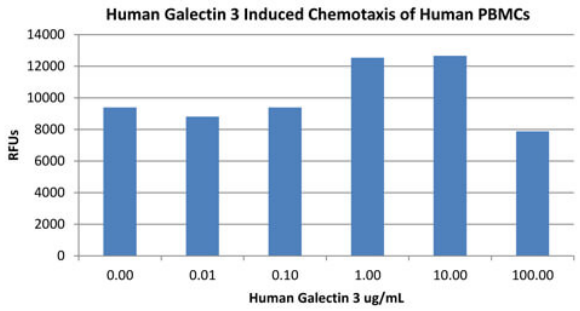
Formulation

Physical State:	Lyophilized
Buffer:	See application note.
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	10µl (10-100µl)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

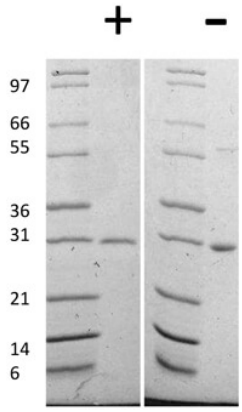
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

Bioactivity of Human Galectin-3 Recombinant Protein. Human PBMCs were allowed to migrate to Human Galectin 3 at (0, 0.01, 0.1, 1, 10 and 100 ug/mL). After 1 hour, cells that migrated were counted using a luminescent substrate and displayed on the bar graph above. Significant increases in migration over basal levels were seen in response to Human Galectin 3 starting at 1 ug/mL. This value is comparable to expected ranges of a chemotactic response of primary human monocytes.



SDS-PAGE

SDS-PAGE of Human Galectin-3 Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 µg Human Galectin-3 in reducing conditions (+). Lane 3: Molecular weight marker. Lane 4: 1 µg Human Galectin-3 in non-reducing conditions (-). Human Galectin-3 has a predicted MW of 26 kDa.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.