

GFH154 Recombinant Human Galectin-3

Description

Galectin-3 belongs to the lectin family of carbohydrate binding proteins. Galectin-3 is expressed by a wide range of cell types including activated T cells, tumor cells, macrophages, osteoclasts, fibroblasts, and epithelial cells. Galectin-3 has specific binding affinity for β -galactoside sugar moieties and has functional roles during development, innate immunity, cell apoptosis, and tumor metastasis. Galectin-3 is associated with cancer, heart failure, stroke, and inflammation. The amino acid sequences of human and mouse Galectin-3 proteins share 80% homology.

Length	250 aa
Molecular Weight	26.2 kDa
Source	E. coli
Accession Number	P17931
Purity	$\geq 95\%$ determined by reducing and non-reducing SDS-PAGE

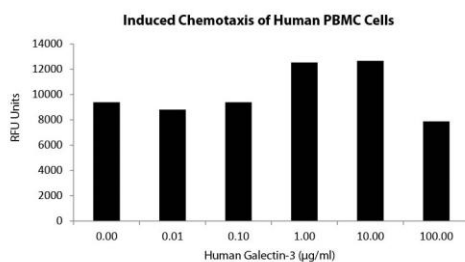
Specifications

Alternative Names	Galactose-specific lectin-3, IgE-binding protein, MAC2, L-29 CPB-35, Gal-3
Biological Activity	Human Galectin-3 is fully biologically active when compared to standard. The activity is determined by the induced chemotaxis of human PBMC cells.
Endotoxin Level	≤ 1.00 EU/ μ g as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5
AA Sequence	MADNFSLHDA LSGSGNPNPQ GWPGAWGNQP AGAGGYPGAS YPGAYPGQAP PGAYPGQAPP GAYHGAPGAY PGAPAPGVYP GPPSGPGAYP SSGQPSAPGA YPATGPYGAP AGPLIVPYNL PLPGGVVPRM LITILGTVKP NANRIALDFQ RGNDVAFHFN PRFNENRRV IVCNTKLDNN WGREERQSVF PFESGKPFKI QVLVEPDHFK VAVNDAHLLQ YNHRVKKLNE IS

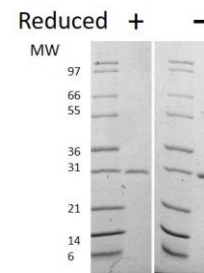
Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Induced chemotaxis of human PBMC cells assay for Human Galectin-3. Cell migration was counted using a luminescent substrate, significant increase in the migration levels is verified in response to Galectin-3.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human Galectin-3 has a predicted Mw of 26.2 kDa.