

Recombinant Human Galectin-3 (rHuGalectin-3)

PrimeGene Technical Data Sheet

Catalog Number:	603-03
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 26.0 kDa, a single non-glycosylated polypeptide chain containing 249 amino acids.
Quantity:	10µg/100µg/500µg
AA Sequence:	ADNFSLHDAL SGSGNPNPQG WPGA WGNQPA GAGGYPGASY PGAYPGQAPP GAYPGQAPPG AYPGAPGAYP GAPAPGVYYPG PPSGPGAYPS SGQPSATGAY PATGPYGAPA GPLIVPYNLP LPGGVVPRML ITILGTVKPN ANRIALDFQR GNDVAFHFNP RFNENNRVI VCNTKLDNNW GREERQSVFP FESGKPFKIQ VLVEPDHFKV AVNDAHLLQY NHRVKKLNEI SKLGISGDID LTSASYTMI
Purity:	> 98 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by its ability to agglutinate human red blood cells is less than 10 µg/ml.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered solution in 1×PBS, 5% Trehalose, 0.02% Tween-20, 3mM β-ME, pH 7.4.
Endotoxin:	Less than 0.1 EU/µg of rHuGalectin-3 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Human Galectin-3

Human Galectin-3 also named AGE-R3, CBP35, GAL3, L29, LGALS3, Mac-2, is belonging to the galectins family and it is encoded by a single gene, LGALS3, located on chromosome 14, locus q21-q22. It is expressed in the nucleus, cytoplasm, mitochondrion, cell surface, and extracellular space. Galectin-3 is approximately 30 kDa and, like all galectins, contains a carbohydrate-recognition-binding domain (CRD) of about 130 amino acids that enable the specific binding of β-galactosides. Given Galectin-3's broad biological functionality, it has been demonstrated to be involved in cancer, inflammation and fibrosis, heart disease, and stroke. Studies have also shown that the expression of galectin-3 is implicated in a variety of processes associated with heart failure, including myofibroblast proliferation, fibrogenesis, tissue repair, inflammation, and Ventricular remodeling. Human Galectin-3 shares 79% amino acid sequence identity with rat and mouse Galectin-3, respectively.