

Recombinant Human Galectin-3/LGALS3 Protein

Catalog Number: PKSH032474

Note: Centrifuge before opening to ensure complete recovery of vial contents.

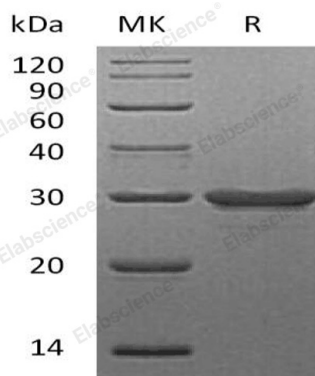
Description

Species	Human
Source	E.coli-derived Human Galectin-3;LGALS3 protein Ala2-Ile250
Calculated MW	26.0 kDa
Observed MW	30 kDa
Accession	P17931
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 50mM HEPES, 5% Sucrose, 5% Mannitol, 0.06% Tween 80, pH7.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

The Galectin family of proteins consists of beta-galactoside binding lectins containing homologous carbohydrate recognition domains (CRDs). They also possess hemagglutination activity; which is attributable to their bivalent carbohydrate binding properties. Galectins are active both intracellularly and extracellularly. They have diverse effects on many cellular functions including adhesion; migration; polarity; chemotaxis; proliferation; apoptosis; and differentiation. Galectins may therefore play a key role in many pathological states; including autoimmune diseases; allergic reactions; inflammation; tumor cell metastasis; atherosclerosis; and diabetic complications. The galectins have been classified into the prototype galectins (1; 2; 5; 7; 10; 11; 13; 14); which contain one CRD and exist either as a monomer or a noncovalent homodimer. The chimera galectins (Galectin3) containing one CRD linked to a nonlectin domain; and the tandem repeat Galectins (4; 6; 8; 9; 12) consisting of two CRDs joined by a linker peptide. Galectins lack a classical signal peptide and can be localized to the cytosolic compartments where they have intracellular functions. However; via one or more as yet unidentified nonclassical secretory pathways; galectins can also be secreted to function extracellularly. Individual members of the galectin family have different tissue distribution profiles and exhibit subtle differences in their carbohydrate-binding specificities. Each family member may preferentially bind to a unique subset of cell surface glycoproteins.