

Recombinant Human Galectin-8/LGALS8 Protein

Catalog Number: PKSH032476

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

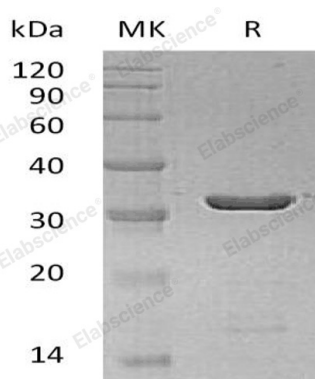
Description

Species	Human
Source	E.coli-derived Human Galectin-8;LGALS8 protein Met 2-Trp 317, with an N-terminal His
Calculated MW	36.6 kDa
Observed MW	34 kDa
Accession	O00214
Bio-activity	Measured by its ability to agglutinate human red blood cells. The ED ₅₀ for this effect is <8 µg/mL.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 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 sterile PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 98 % as determined by reducing SDS-PAGE.

Background

The Galectin family of proteins, with specificity for N-acetylglucosamine-containing glycoproteins, 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. Although they are localized primarily in the cytoplasm and lack a classical signal peptide, galectins can also be secreted by one or more unidentified, non-classical, secretory pathways. 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 (Galectin-3) 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.