Recombinant Human Galectin-12 protein(N-His)

Catalog Number: PKSH034187

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

Description

Species	Human
Source	E.coli-derived Human Galectin-12 protein Ser 2-Ser 336, with an N-terminal His
Calculated MW	38.4 kDa
Observed MW	38 kDa
Accession	Q96DT0
Bio-activity	Not validated for activity

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. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Galectin-12 (Gal-12) is a member of the tandem repeat-type galectin family, characterized by two carbohydrate recognition domains (CRD) connected by a linker region within a single peptide chain. The CRD mediates β-galactoside binding and is essential for interacting with the VPS13C protein. Gal-12 is expressed not only in adipose tissue but also in macrophages and other leukocytes. It participates in diverse biological processes, including cell cycle regulation, apoptosis, and differentiation. Notably, Gal-12 has been identified as a key driver of macrophage polarization toward the M1 phenotype, thereby promoting inflammation and reducing insulin sensitivity in adipocytes. Moreover, Gal-12 exhibits lactose-binding affinity and has been implicated in adipocyte apoptosis, suggesting a role in adipose tissue homeostasis and programmed cell death. These findings position Gal-12 as a potential therapeutic target for metabolic and inflammatory disorders. Animal-Free Galectin-12 Protein, Human (His), produced in E. coli with an N-terminal His tag, offers a recombinant tool for functional studies. This product is intended for cell culture applications, enabling researchers to investigate the molecular mechanisms of Gal-12 in immune regulation, adipocyte biology, and insulin resistance.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web: www.elabscience.com
Email: techsupport@elabscience.com